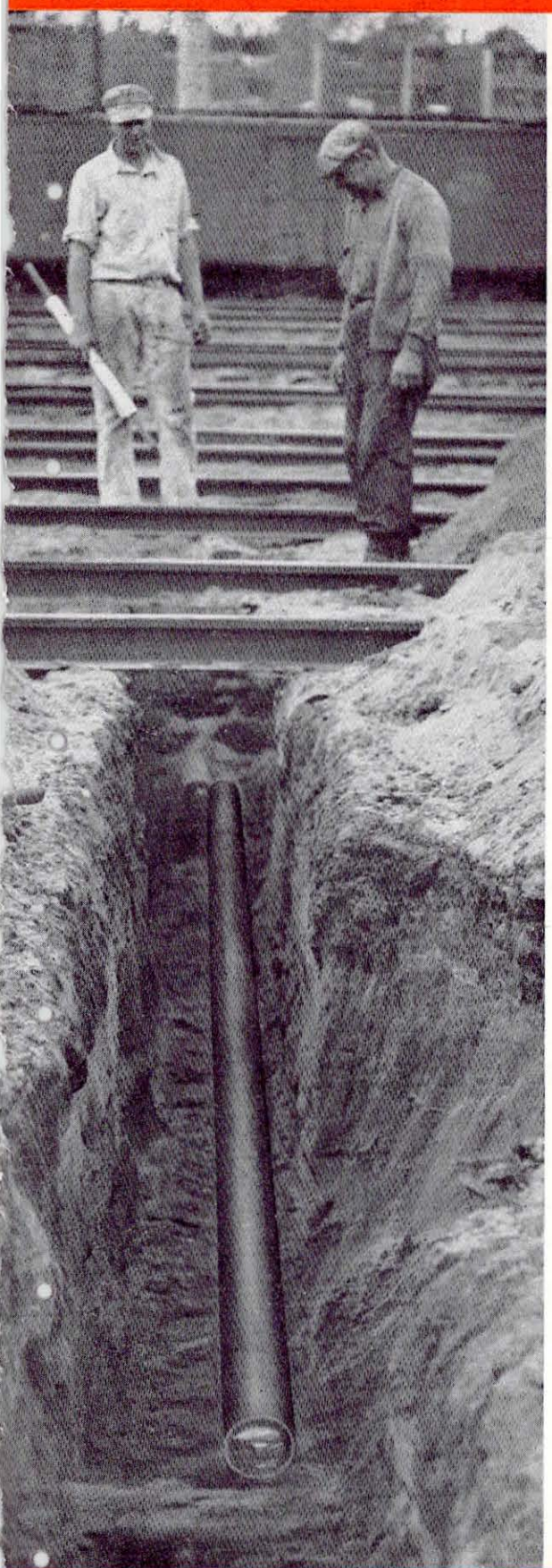
JULY 18, 1942

Railway Age

Founded in 1856

McCARTNEY LIBRARY
GENEVA COLLEGE



In fighting corrosion, too, the best defense is offense

BYERS WROUGHT IRON

Railroad men don't have to be told the importance of avoiding unnecessary maintenance due to corrosion attack—or the best protection against it. Wars with corrosion are won by striking *first,* through the installation of materials with *proven* durability.

This was well illustrated when the New York, New Haven and Hartford Railroad Company installed new underground air lines in its yards at Hartford, Conn. Wrought iron was specified by the railroad. Foskett & Bishop, Contractors, used Byers Wrought Iron Pipe.

Air lines must face a variety of corrosive conditions, from soils, water, and (where exposed) from industrial atmospheres. Wrought iron's unique structure discourages local pitting, and so helps to avoid the pin-hole leaks which may occur in ordinary materials. Its superior durability has been so often demonstrated that it is used by a number of prominent railroads.

Air piping is only one of the many applications on which our Engineering Service Department has been building an "Experience Pool" of performance data for a number of years. Since wrought iron has been used, sometime or another, in most corrosive applications, this "Experience Pool" is of great value today, when so many specifiers must find durable alternate materials for certain services. If you have any such problem, here is the combined experience of hundreds of practical railroad men waiting for you to tap it. Just write us details of the application, and we will furnish any data we have on how wrought iron has stood up. Ask, also, for our General Catalog; you'll find it helpful.

A. M. Byers Company. Established 1864. Offices in Pittsburgh, Boston, New York, Philadelphia, Washington, Chicago, St. Louis, Houston, Seattle, San Francisco.

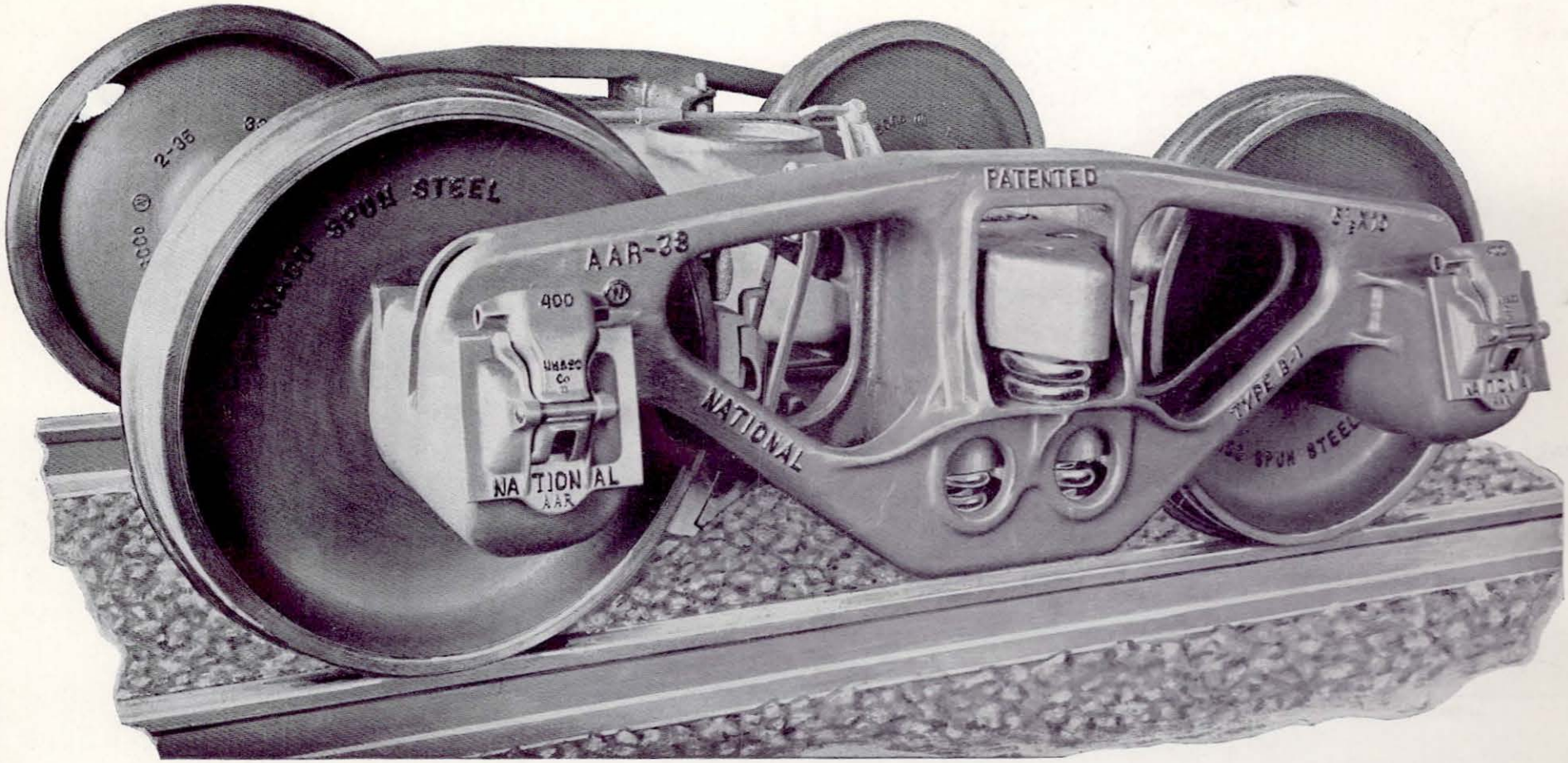
BYERS GENUINE WROUGHT IRON

TUBULAR AND HOT ROLLED PRODUCTS

STEEL TUBULAR PRODUCTS

CORROSION COSTS YOU MORE THAN WROUGHT IRON

Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 113, No. 3.



SMOOTHER RIDING and SAFETY at Higher Freight Speeds

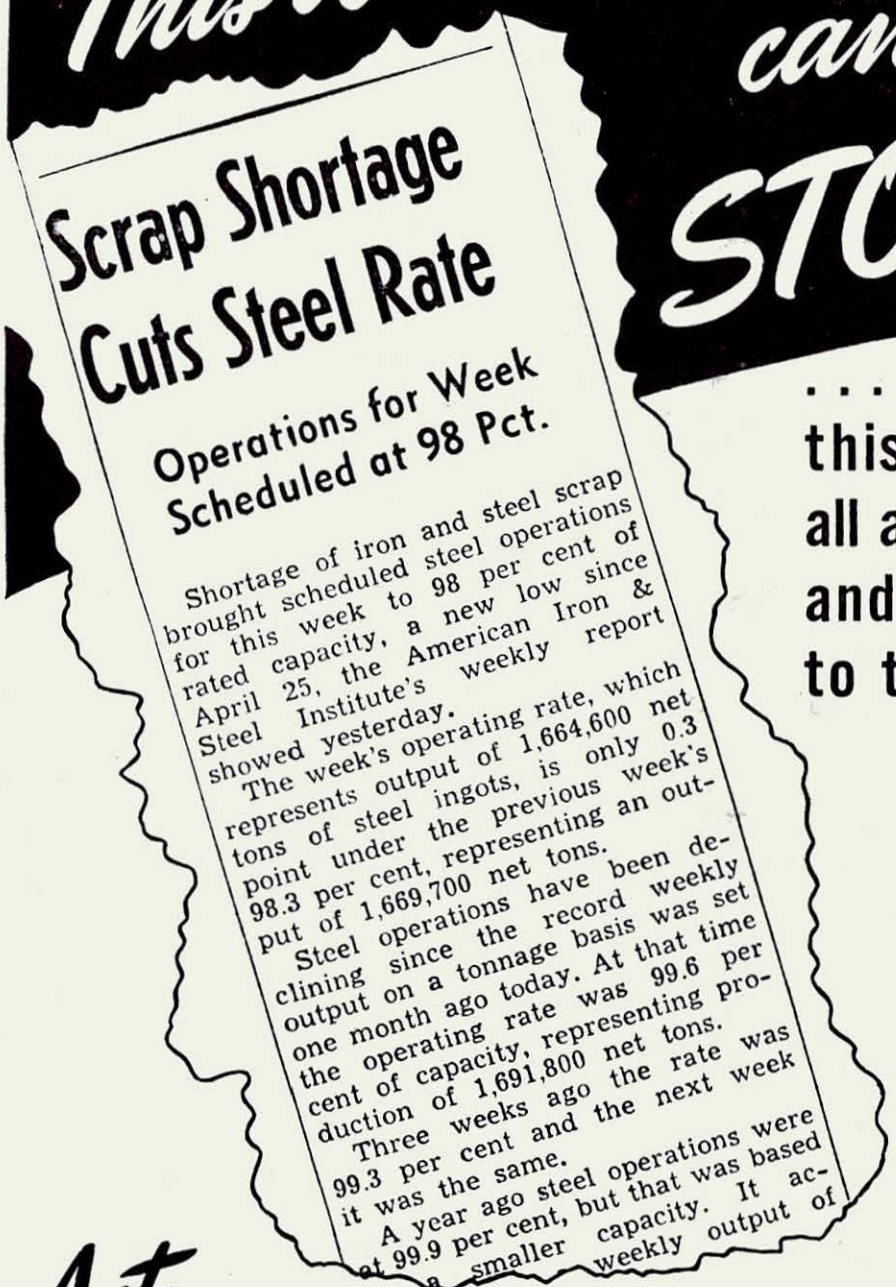
NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY

GENERAL OFFICES: CLEVELAND, OHIO

Sales Offices: New York, Philadelphia, Chicago, St. Louis, San Francisco ● Works: Cleveland, Chicago, Indianapolis, Sharon, Pa., Melrose Park, Ill.

Canadian Representatives, Railway & Power Engineering Corporation, Ltd., Toronto and Montreal

This War Production Loss can be STOPPED



Scrap Shortage Cuts Steel Rate

Operations for Week Scheduled at 98 Pct.

Shortage of iron and steel scrap brought scheduled steel operations for this week to 98 per cent of rated capacity, a new low since April 25, the American Iron & Steel Institute's weekly report showed yesterday.

The week's operating rate, which represents output of 1,664,600 net tons of steel ingots, is only 0.3 point under the previous week's 98.3 per cent, representing an output of 1,669,700 net tons.

Steel operations have been declining since the record weekly output on a tonnage basis was set one month ago today. At that time the operating rate was 99.6 per cent of capacity, representing production of 1,691,800 net tons.

Three weeks ago the rate was 99.3 per cent and the next week it was the same.

A year ago steel operations were at 99.9 per cent, but that was based on a smaller capacity. It ac- weekly output of

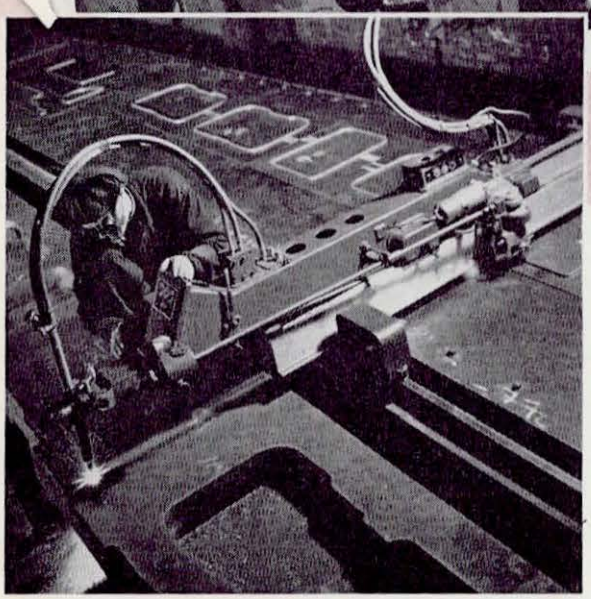
. . . if every reader of this page will start all available scrap iron and steel on its way to the mills.

Act today! **Call In Your Nearest Scrap Dealer!**

INLAND STEEL CO.

38 S. Dearborn Street, Chicago • Sales Offices: Milwaukee, Detroit, St. Paul, St. Louis, Kansas City

U·S·S *Wrought Steel*



U·S·S WROUGHT STEEL LOCOMOTIVE FRAME being flame cut with pantograph-type machine. Note the metal template at right which automatically guides the cutting torch to reproduce exact contours.

FOR THE LOCOMOTIVES

TODAY—America's railroads are doing one of the biggest all-out war jobs in history. To these carriers is entrusted the task of transporting hundreds of thousands of soldiers and sailors — moving millions of tons of freight and express — handling an enormously increased passenger traffic.

For this tremendous task, adequate and efficient motive power is a vital necessity. Where frames for urgently needed new locomotives are required in a hurry, U·S·S Wrought Steel Locomotive Foundations are ideally filling the bill.

Recent installations on new locomotives include thirty U·S·S Wrought Steel Frames for 15 Chesapeake and Ohio, 0-8-0 Switchers; twenty for 10 Richmond, Fredericksburg & Potomac, 2-8-4 Locomotives; twenty for 10 New York, Chicago & St. Louis, 2-8-4's.

USS

UNITED

Locomotive Foundations

NEEDED FOR TOTAL WAR

In all these applications, U·S·S Wrought Steel Locomotive Foundations provide the exceptional advantages of fast production, low first cost, greater margin of safety. There is no waiting for intricate patterns and moulds. The fact that these frames are flame-cut to contour from a solid slab of homogeneous, open-hearth wrought steel, rolled to dimension and heat-treated, insures uniformly high physical properties throughout.

Our engineers will gladly discuss the detail and economies of U·S·S Wrought Steel Foundations at any time that suits you.

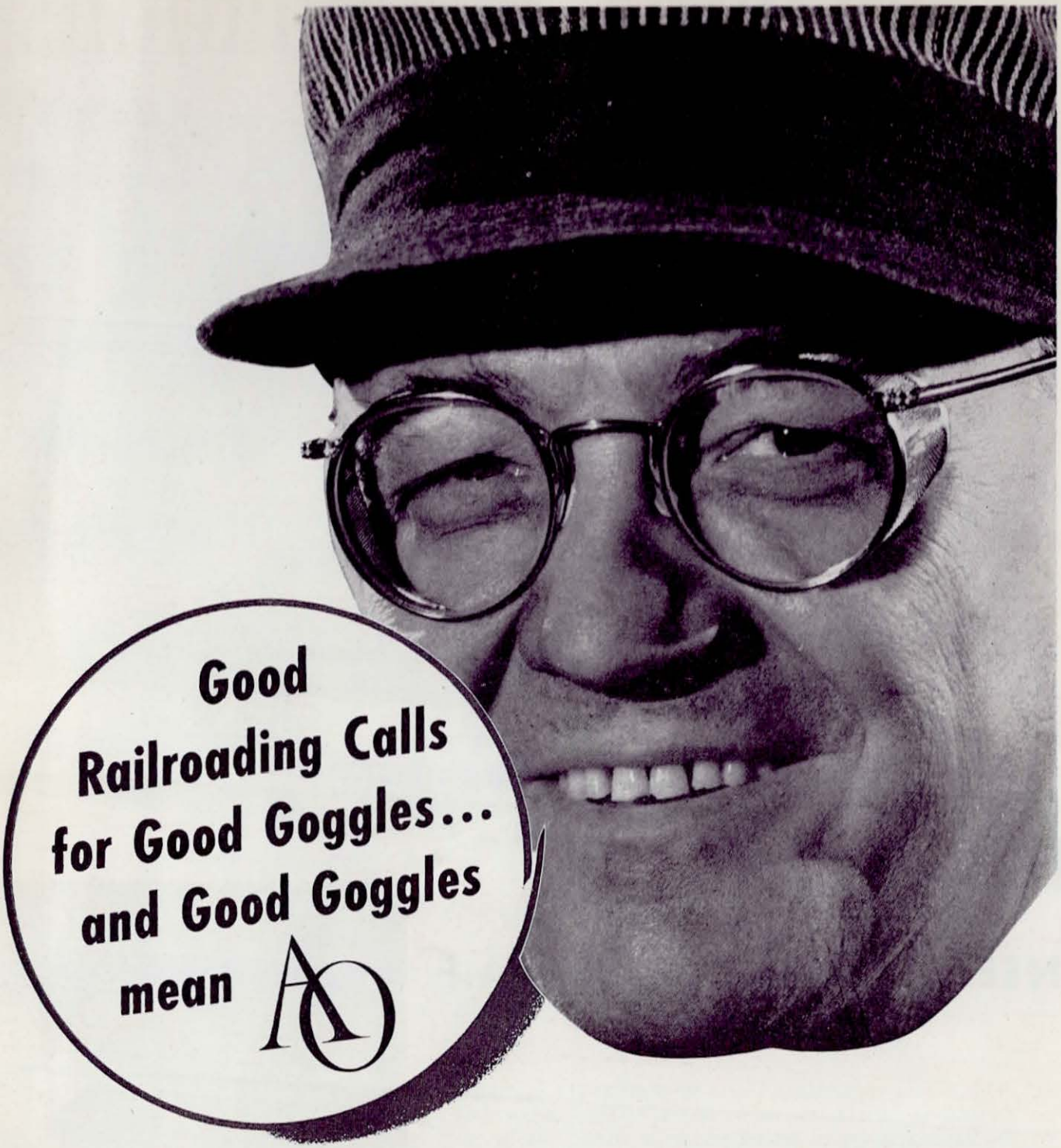
CARNEGIE-ILLINOIS STEEL CORPORATION

Pittsburgh and Chicago

Columbia Steel Company, San Francisco, *Pacific Coast Distributors*
United States Steel Export Company, New York

CLOSE AND PAINSTAKING INSPECTIONS safeguard every operation in the production of U·S·S Wrought Steel Locomotive Foundations. Nothing is left to chance to ensure perfection in the finished product.

UNITED STATES STEEL



It is good railroading to keep eye accidents out of a System with good goggles. And today, when every worker in every department—mechanical, electrical, signal, train service and maintenance—is needed for your railroad's *toughest job,* good American goggles are more necessary now than ever before.

American Optical Company, pioneer developers of products to aid and protect vision, offers you just the right goggles for every type of eye hazard in railroading. AO Goggles are designed for safety and comfort. Equipped with Deep-Curved Super Armorplate Lenses, they offer greater resistance to impact.

THE American Optical COMPANY

SOUTHBRIDGE MASSACHUSETTS

TOUGH SERVICE REQUIRES

TOUGH CASTINGS

The production of cast armor castings for various types of gun mounts and gun parts for the Navy constitutes one of the major war efforts of the American Steel Foundries.

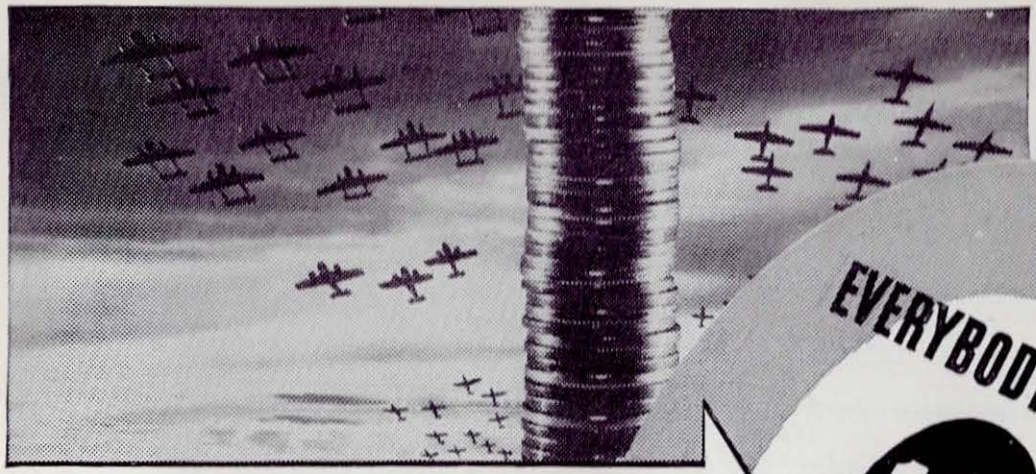
This cast armor is in severe service, not only in gun construction, but in tanks and armored vehicles.

Its development was due largely to the continuous activity of "The Foundries" research staff.

While armament comprises a large volume of the work of the American Steel Foundries, facilities are still available for the production of railroad and industrial castings. These too are essential in winning the war, for sufficient freight cars must be supplied to keep material and armament moving.

Self-Aligning Trucks are now in service under more than 100,000 freight cars.

AMERICAN STEEL FOUNDRIES



EVERYBODY

10%

EVERY PAYDAY

New Target for Industry:

More Dollars Per Man Per Month in the PAY-ROLL WAR SAVINGS PLAN

TO WIN THIS WAR, more and more billions are needed and needed fast—AT LEAST A BILLION DOLLARS A MONTH IN WAR BOND SALES ALONE!

This means a *minimum* of 10 percent of the gross pay roll invested in War Bonds in every plant, office, firm, and factory in the land.

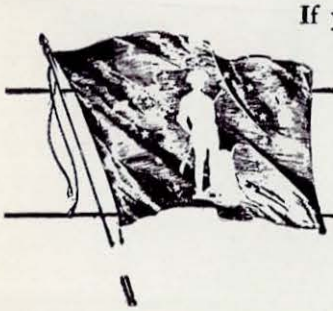
Best and quickest way to raise this money—and at the same time to "brake" inflation—is by stepping up the Pay-Roll War Savings Plan, having every company offer every worker the chance to buy MORE BONDS.

Truly, in this War of Survival, VICTORY BEGINS AT THE PAY WINDOW.

If your firm has already installed the Pay-Roll War Savings Plan, *now is the time*—

1. To secure wider employee participation.
2. *To encourage employees to increase the amount of their allotments for Bonds, to an average of at least 10 percent of earnings—because "token" payments will not win this war any more than "token" resistance will keep the enemy from our shores, our homes.*

If your firm has not already installed the Pay-Roll War Savings Plan, *now is the time to do so.* For full details, plus samples of result-getting literature and promotional helps, write, wire, or phone: War Savings Staff, Section E, Treasury Department, 709 Twelfth Street NW., Washington, D. C.



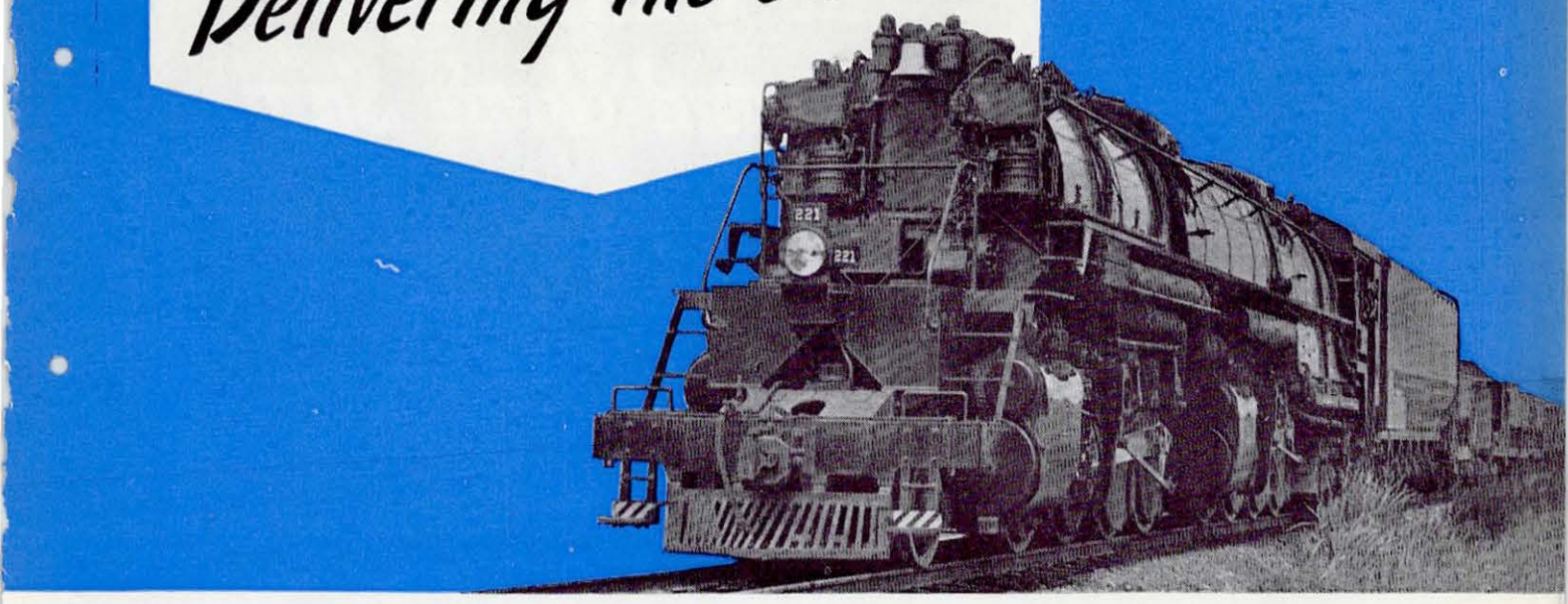
U. S. War Savings Bonds

This space is a contribution to America's all-out war program by

RAILWAY AGE

Baldwin serves the Nation which the Railroads helped to build

America's Railroads are *Delivering the Goods*



with **Baldwin** Steam Power . . . .

Modern steam locomotives, many of which were built by Baldwin, are bearing the brunt of the greatest freight traffic movement in the history of the American railroads.

The demand for heavy tonnage, combined with high speed, finds an answer in modern steam locomotives with large diameter driving wheels, great boiler capacity, a high degree of superheat and low steam consumption per horsepower. Fewer such locomotives are required for a given service and double-heading is reduced to a minimum.

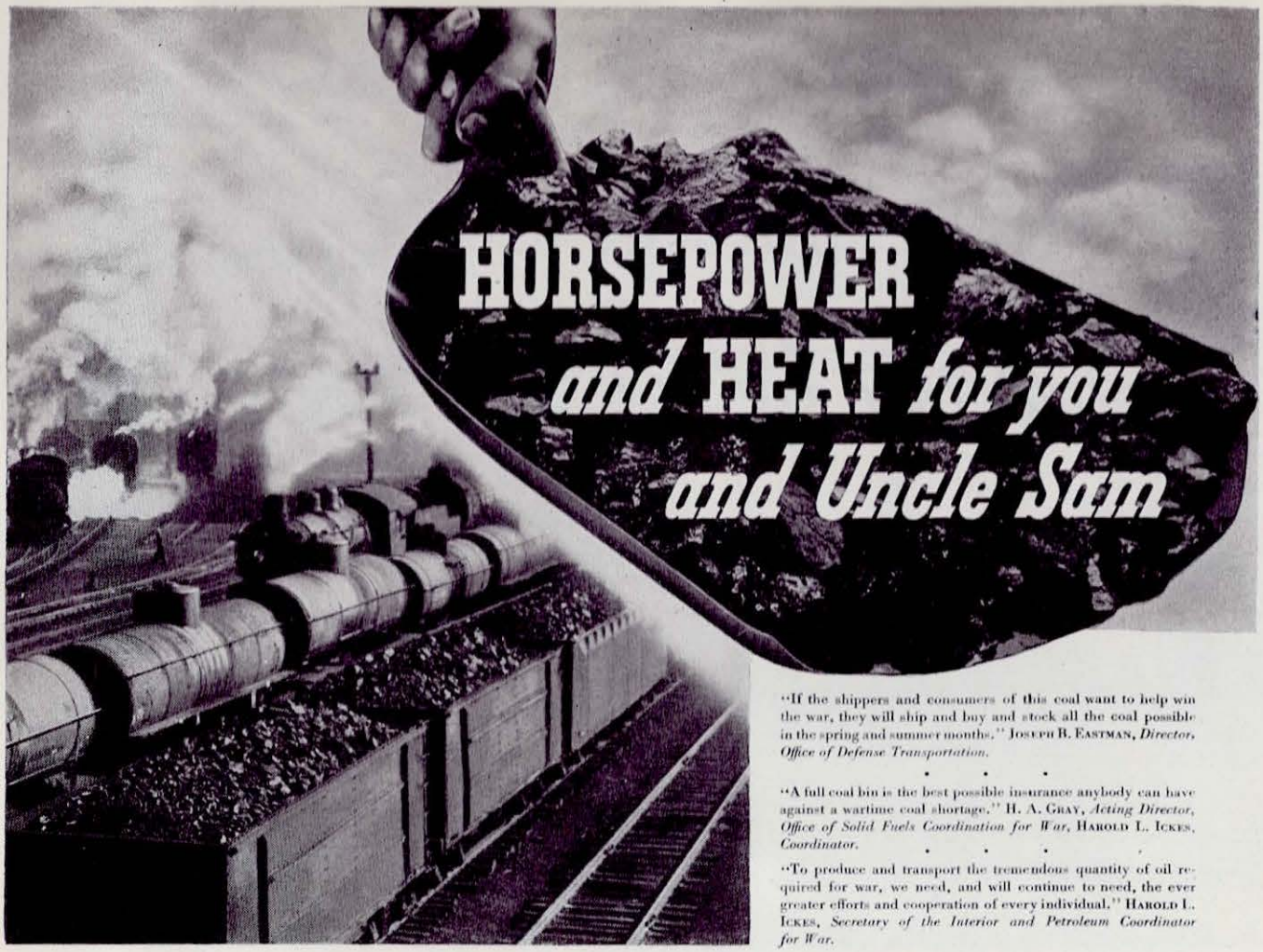
As never before, America needs its railroads to transport military equipment and men—to haul the coal, iron ore, and other raw materials to industries producing the sinews of war—to bring food and other necessities of life to soldier and civilian alike.

As never before, the railroads are utilizing the inherent advantages of modern steam power to haul these great tonnage trains over the road. Thus, the locomotives, comprising this great railroad army, take their places alongside the tanks, guns, planes and ships needed to win the war.

THE BALDWIN LOCOMOTIVE WORKS

BLW THE BALDWIN GROUP

Philadelphia



"If the shippers and consumers of this coal want to help win the war, they will ship and buy and stock all the coal possible in the spring and summer months." JOSEPH B. EASTMAN, *Director, Office of Defense Transportation.*

• • •

"A full coal bin is the best possible insurance anybody can have against a wartime coal shortage." H. A. GRAY, *Acting Director, Office of Solid Fuels Coordination for War,* HAROLD L. ICKES, *Coordinator.*

• • •

"To produce and transport the tremendous quantity of oil required for war, we need, and will continue to need, the ever greater efforts and cooperation of every individual." HAROLD L. ICKES, *Secretary of the Interior and Petroleum Coordinator for War.*

IT takes a lot of transportation to keep America's plants supplied with the ore, chemicals, and other necessities for the machines of war.

And there is still another urgent demand — FUEL — for power and heat.

So to the railroads' record volume of wartime freight is added the emergency carrying of coal and oil.

Today the railroads are hauling about 750,000 barrels of oil a day into the East—more than 50 times the amount they are usually called upon to carry.

Production of bituminous and anthracite coal, most of which moves by rail, has been stepped up to nearly 12½ million tons a week.

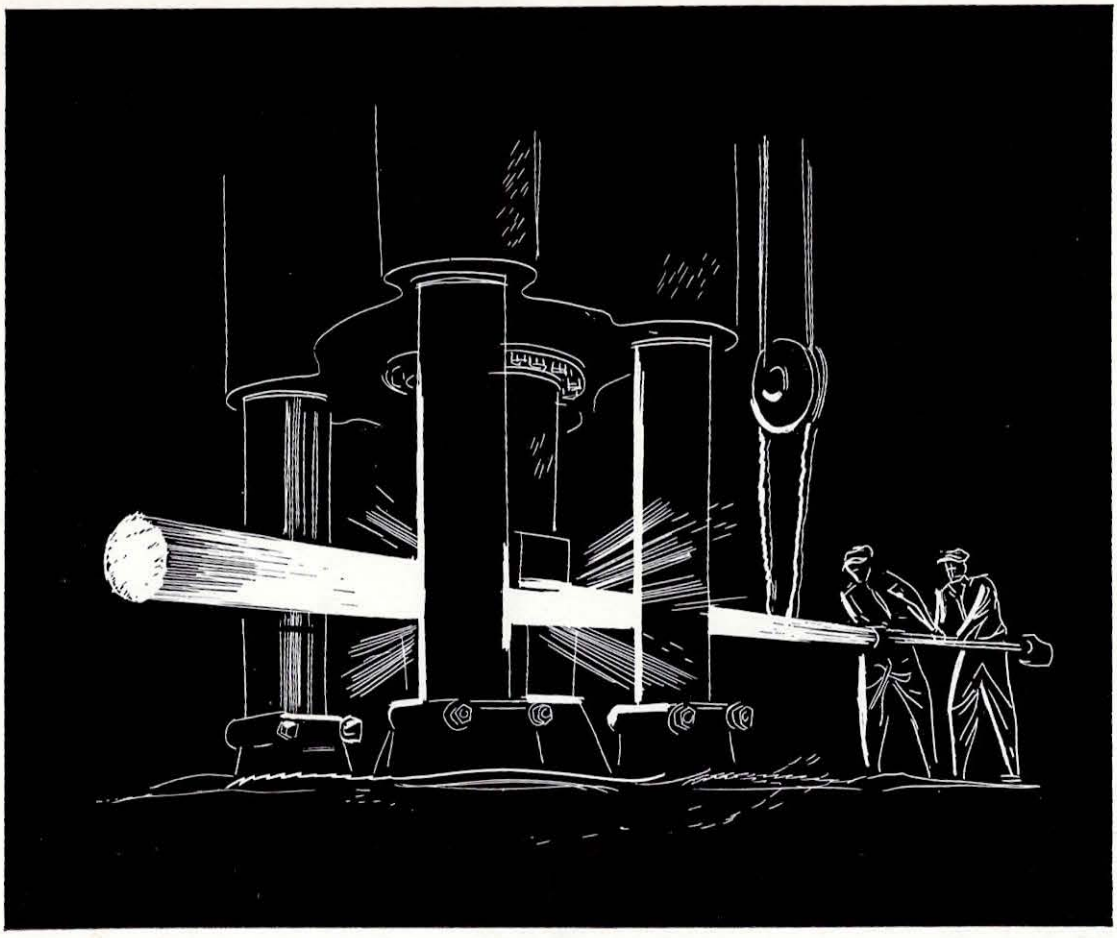
How these records have been made is a story of splendid cooperation. Shippers are loading cars fuller and faster, and releasing them quicker.

And they are cooperating, too, by anticipating their coal needs — another way to help keep the war program on the move — to help keep our homes warmer this winter.

ASSOCIATION OF

AMERICAN RAILROADS

WASHINGTON, D. C.



Standard forgings . . . SERVING THE RAILROADS *for more than 60 years*

All that has gone before seems but preparation . . . the period of trial . . . for the task which must be done today. And, as the great American railroads shoulder more and more of the gigantic transportation burden, many of them rely on the quality of Standard products, proven in service, to keep equipment on the job. Included among these products are tires, steel wheels, springs, axles, crank pins, connecting rods, piston rods, driving wheel centers and many other parts made by Standard.

147 years of experience plus complete control of every manufacturing process from acid open hearth to finished forging accounts in large measure for Standard dependability. Constant supervision by trained metallurgists and a complete modern testing laboratory help to safeguard Standard quality and customer's interests.

The resources of Standard's 119-acre plant, its skilled personnel and modern equipment, are at the service of the nation in speeding the production and transportation of victory's goods.

FORGINGS • ROLLED WHEELS • TIRES • CASTINGS • SPRINGS

STANDARD STEEL WORKS

BLW THE BALDWIN GROUP

DIVISION OF

THE BALDWIN LOCOMOTIVE WORKS

PHILADELPHIA

(This one is from a.C.f. !)

BUNDLES FOR JAPAN

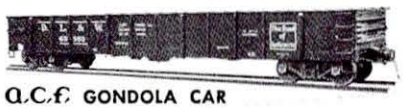
and a thousand other things for victory!

Bombers for Britain, and bayonets for Brisbane . . . motor trucks for Moscow, and mosquito nets for Medicine Hat . . . caissons for Canada, and cartridges for China . . . shells for Siberia, and side-arms for Sydney . . . tanks for Tula, and trailers for Tiflis . . . boiler-tubes for Bremerton, and blinker-tubes for Bombay . . . jeeps for Jamaica, and jerkins for Juneau . . . dive-bombers for Dutch Harbor, and depth-charges for destroyers . . . the tools of war now pour to the ends of the earth in an overwhelming flood of American MIGHT!

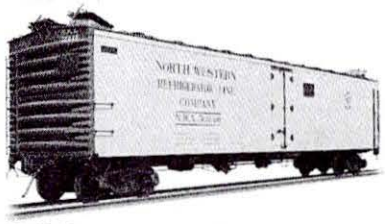
In speeding this greatest movement of freight the world has ever seen, ACF quarry cars and mine cars, tank cars and flat cars, gondolas and box cars, refrigerator cars and hopper cars . . . ACF cars of every type — by the hundreds and the thousands — keep rolling from coast to coast again and again in the service of American railroads, aiding them in their gigantic task of *moving one million tons of freight one mile in each sixty seconds of the day and night!*

For nearly a century the American Car and Foundry Company has built the kind of freight cars which have won wide recognition that *the cars ACF builds it is known to build well.*

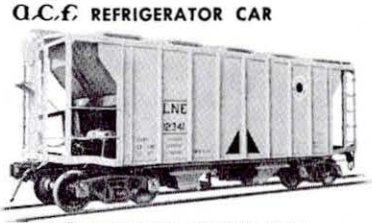
ACF QUARRY CAR



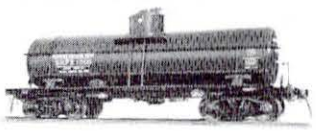
ACF GONDOLA CAR



ACF REFRIGERATOR CAR

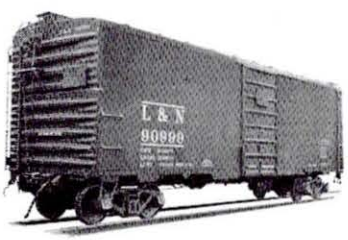


ACF COVERED HOPPER CAR



ACF TANK CAR

ACF HOPPER CAR



ACF BOX CAR

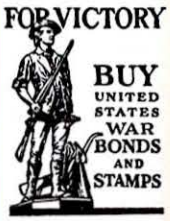
ACF FLAT CAR

ACF MINE CAR

ACF AMERICAN CAR AND FOUNDRY COMPANY

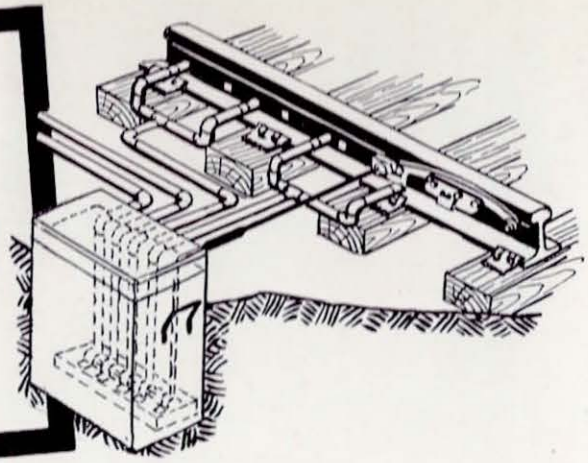
NEW YORK • CHICAGO • ST. LOUIS • CLEVELAND • PHILADELPHIA • PITTSBURGH • ST. PAUL • SAN FRANCISCO

FOR VICTORY



BUY UNITED STATES WAR BONDS AND STAMPS

Here's a Proved Way to Speed Your Mounting WAR LOADS...



...Reduce Wheel Friction ON CURVES with RACOR RAIL LUBRICATOR

HOW THE RACOR LUBRICATOR WORKS

❶ **Operator fills reservoir and oils exposed parts.**

❷ **Passing wheels pick up grease from the delivery rail.**

❸ **And deposit it on the rails at curves which may be many miles from distribution points.**

Pressed for ways to speed up war traffic? Then you can't afford to overlook Racor Rail Lubricators. They are simple to install . . . automatic in operation . . . assure constant and proper greasing of curved stretches in your tracks.

With wheel friction substantially reduced at these points, your present heavily loaded trains can move around curves faster with the same amount of power. Or, more cars per train can be pulled at the same speed and with no increase in power. Both these advantages mean a quicker delivery of war goods.

What's more, Racor Rail Lubricators add extra life to rails themselves as well as saving wheel wear and power. It will pay you to get all the facts on the advantages of Racor Rail Lubricators. Write us today.

RACOR

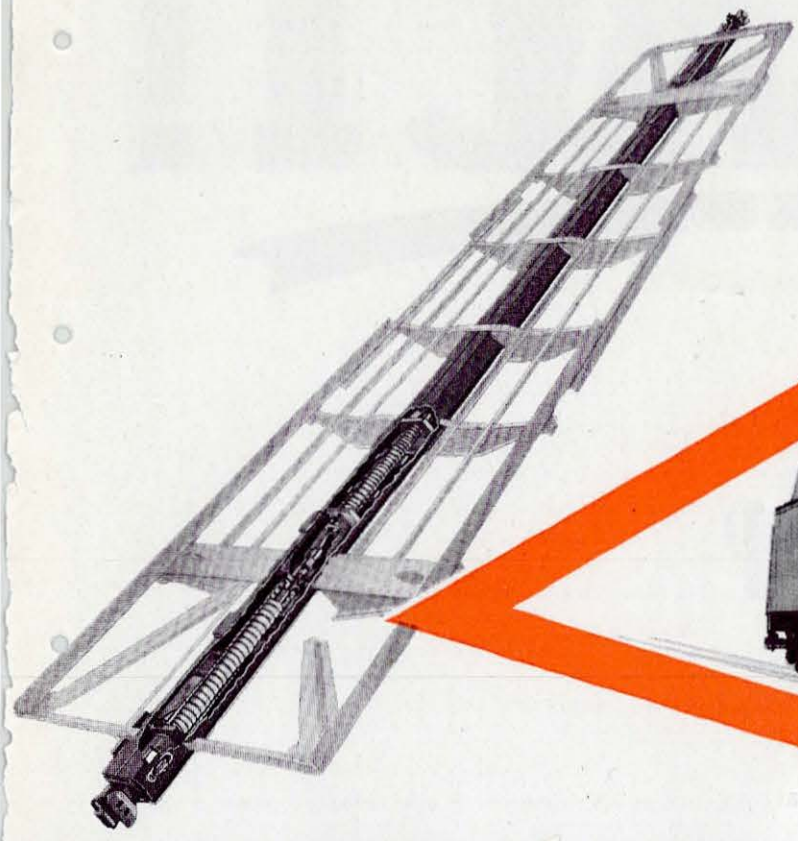
RAMAPO AJAX

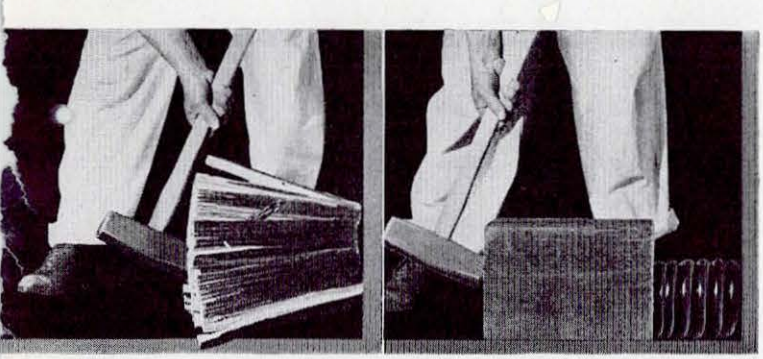
Division of THE AMERICAN BRAKE SHOE AND FOUNDRY COMPANY

230 PARK AVENUE NEW YORK, N. Y.

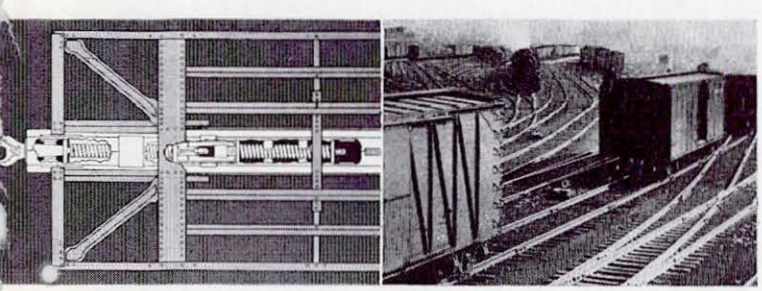
DURYEA *Cushion* UNDERFRAME

makes PERFECT SHIPPING possible





HOW DURYEA CUSHIONING lessens shock. Left: Block of wood (sill) against wall will crack when hit with sledge. Right: With spring allowing block (sill) to slide, the hardest blows won't cause damage.



PHANTOM VIEW shows floating center sills, springs that lessen each blow. Duryea Cushion Gear lasts for the entire life of the car.

MR. RAILROAD DIRECTOR! Duryea gear cuts maintenance on all parts of car, reduces damage claims, pays for itself quickly!

Freight moves faster today than ever before.
But this extra speed means harder jolts in coupling, starting, stopping.

Duryea Cushioning gives shockproof protection to lading, by letting the car body float through each wallop instead of being held rigid against it.

That's why Duryea-Cushioned Cars, wherever available, are preferred for vital war shipments. They not only make perfect shipping possible—they require less packing and bracing, reduce maintenance time and expense, *keep rolling.*

Watch the swing to Duryea when unlimited replacement of obsolete, wornout cars is resumed. Plan now for the future. Investigate Duryea today.

Write for illustrated booklet

O. C. DURYEA CORPORATION, *30 Rockefeller Plaza, New York, N. Y.* *Field Building, Chicago, Ill.*

DURYEA *Cushion* UNDERFRAME FOR FREIGHT CARS

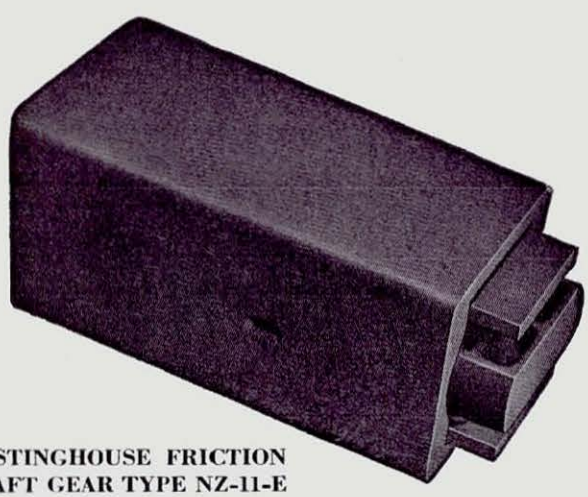
THE MODERN SAFEGUARD FOR SHOCKPROOF SHIPPING

IMPACT!

WESTINGHOUSE FRICTION DRAFT GEAR TYPE NY-11-E (Certified A.A.R.)

Protection against the impact of starting, stopping and hauling long modern trains requires:

1. A.A.R. Friction Type Draft Gears which keep slack at a minimum.
2. Friction Draft Gears which have high cushioning capacity and low recoil.



WESTINGHOUSE FRICTION DRAFT GEAR TYPE NZ-11-E (Certified A.A.R.)

Because of a constant program of testing, development, and performance studies, Cardwell and Westinghouse Draft Gears continue to fully meet the above requirements as well as the detailed requirements and tests of the A.A.R., without exceeding the 2¾" travel approved by the A.A.R.

CARDWELL WESTINGHOUSE CO., CHICAGO
CANADIAN CARDWELL CO., LTD., MONTREAL

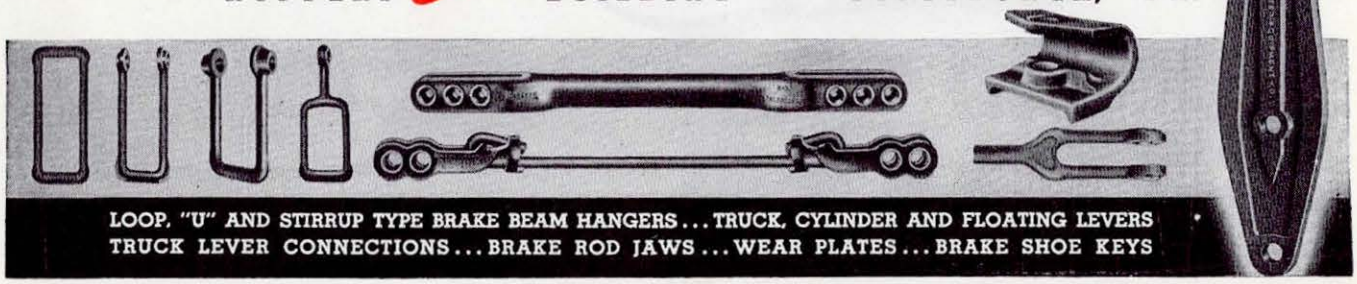
LESS WEIGHT

Schaefer Forged Steel Brake Gear Parts aid America's war effort by producing the greatest possible improvement of car braking facilities per unit of material used.

LONGER LIFE

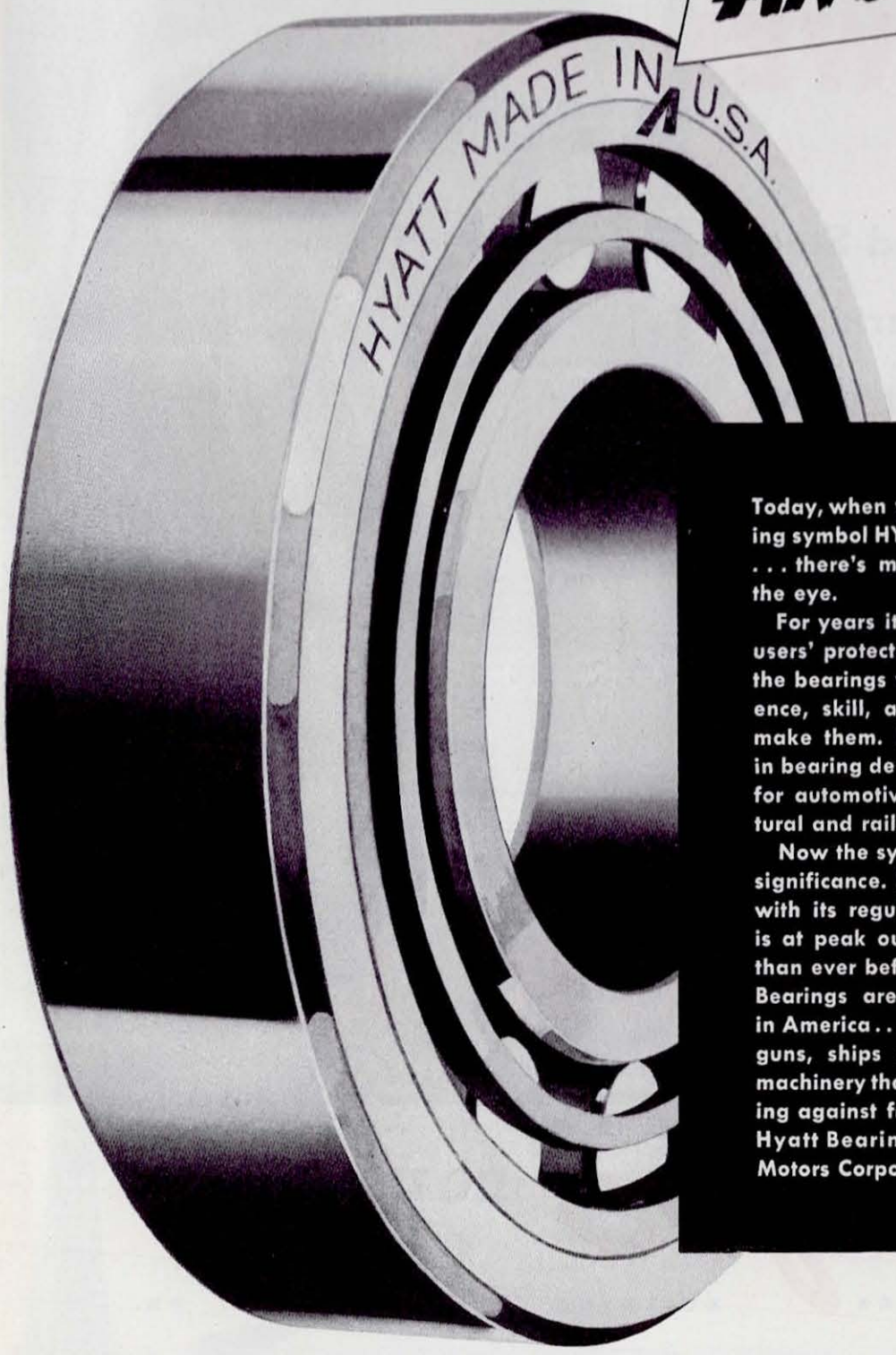
Schaefer EQUIPMENT COMPANY

KOPPERS BUILDING • PITTSBURGH, PA.



LOOP, "U" AND STIRRUP TYPE BRAKE BEAM HANGERS... TRUCK, CYLINDER AND FLOATING LEVERS
TRUCK LEVER CONNECTIONS... BRAKE ROD JAWS... WEAR PLATES... BRAKE SHOE KEYS

AND FOR



Today, when you look at the bearing symbol HYATT MADE IN U.S.A. . . . there's more to it than meets the eye.

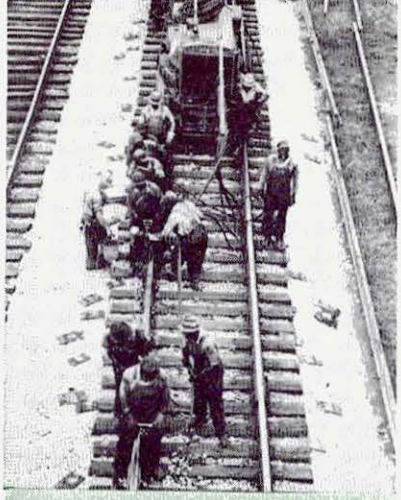
For years it has represented the users' protection, a guaranty that the bearings were as good as science, skill, and experience could make them. It identified the best in bearing design and performance for automotive, industrial, agricultural and railroad applications.

Now the symbol takes on added significance. It indicates that Hyatt, with its regular and wartime job, is at peak output, harder at work than ever before; that Hyatt Roller Bearings are serving everywhere in America . . . in the vitals of tanks, guns, ships and planes and the machinery that makes them . . . fighting against friction *and for* U. S. A.

Hyatt Bearings Division, General Motors Corporation, Harrison, N. J.

THE 50TH YEAR OF

HYATT ROLLER BEARINGS



Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

Vol. 113 July 18, 1942 No. 3

In This Issue

Page

Railroads Heed the Nation's Plea for Rail and Scrap 90

A report on the conference held in Chicago on July 10—attended by spokesmen for the war agencies and the railroads—at which ways and means for increasing the production of railroad scrap and relay rail for military use were discussed.

CTC Puts More Trains Over an Erie Cut-Off 93

How the Erie increased track capacity by installing centralized traffic control on a single-track cut-off 28.6 miles long, is set forth in this article.

Is Fuel Economy a Legitimate War-Time Objective? 96

An abstract of a paper presented at the annual meeting of the Smoke Prevention Association by T. Olson, Superintendent of Motive Power of the Chicago Great Western.

EDITORIALS

Risking a Transportation Shortage 87
Taxing Transportation 88
Obeying Orders 88
Better Yards Will Help 89

GENERAL ARTICLES

Railroads Heed the Nation's Plea for Rail and Scrap 90
CTC Puts More Trains Over An Erie Cut-Off 93
Is Fuel Economy a Legitimate War-Time Objective? by T. Olson 96
Simplifying Interline Payments, by H. S. Latham 99
Susquehanna Works Its Diesels 24 Hours a Day 101
Streamline Outmoded Union Station at Shreveport, La. 102

COMMUNICATIONS 106

NEW BOOKS 107

RAILROADS-IN-WAR NEWS 108

GENERAL NEWS 113

FREIGHT OPERATING STATISTICS 125

The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service

★

PRINTED IN U. S. A.

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK, N. Y., AND 105 W. ADAMS STREET, CHICAGO, ILL.

WASHINGTON, D. C.: 1081 NATIONAL PRESS BUILDING. CLEVELAND: TERMINAL TOWER. SEATTLE: 1038 HENRY BUILDING. SAN FRANCISCO: 550 MONTGOMERY STREET, ROOMS 805-806. LOS ANGELES: 530 WEST 6th STREET.

SAMUEL O. DUNN, CHAIRMAN. HENRY LEE, PRESIDENT. ROY V. WRIGHT, VICE-PRESIDENT AND SECRETARY. F. H. THOMPSON, E. T. HOWSON, F. C. KOCH, R. E. THAYER, H. A. MORRISON, VICE-PRESIDENTS. J. T. DeMOTT, TREASURER.

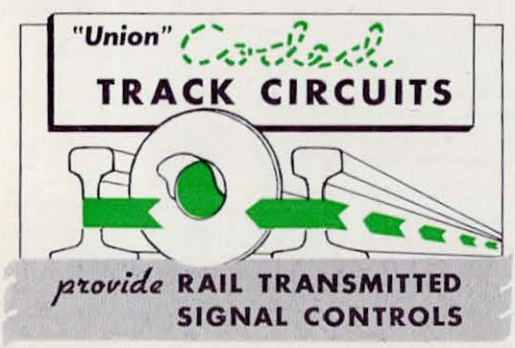
SAMUEL O. DUNN, EDITOR. ROY V. WRIGHT, MANAGING EDITOR. ELMER T. HOWSON, WESTERN EDITOR. JAMES G. LYNE, ASS'T TO EDITOR. C. B. PECK, ALFRED G. OEHLER. E. L. WOODWARD. J. H. DUNN. D. A. STEEL. R. A. DOSTER. H. C. WILCOX. NEAL D. HOWARD. CHARLES LAYNG. GEORGE E. BOYD. WALTER J. TAFT. M. H. DICK. JOHN H. KING. JOHN S. VREELAND. ARTHUR J. McGINNIS. J. L. STOVER. C. B. TAVENNER.

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PAPERS (A. B. P.) AND AUDIT BUREAU OF CIRCULATIONS (A. B. C.).

SUBSCRIPTIONS, INCLUDING 52 REGULAR WEEKLY ISSUES, AND SPECIAL DAILY EDITIONS PUBLISHED FROM TIME TO TIME IN NEW YORK, OR IN PLACES OTHER THAN NEW YORK, PAYABLE IN ADVANCE AND POSTAGE FREE. UNITED STATES, U. S. POSSESSIONS AND CANADA: 1 YEAR, $6.00; 2 YEARS, $10.00; FOREIGN COUNTRIES, NOT INCLUDING DAILY EDITIONS: 1 YEAR, $8.00; 2 YEARS, $14.00. SINGLE COPIES, 25 CENTS EACH. H. E. McCANDLESS, CIRCULATION MANAGER, 30 CHURCH STREET, NEW YORK.

"UNION" CODED TRACK CIRCUIT CONTROL

provides for increased block lengths with a minimum use of material!



With the "Union" Coded Track Circuit Control System, all signal controls are rail transmitted from the exit end to the entrance end of the block. In two-block three-indication signaling, two codes are used, clear 180-code and approach 75-code. Other codes may be employed for additional signal indications. A reverse code may be used for the control of approach lighting, approach locking and other similar functions. . . . .

A DECIDED advantage of the "Union" Coded Track Circuit Control System is that the wayside signals are directly controlled by means of the coded track circuit current and therefore signal control line wires may be greatly reduced in number or entirely eliminated. For example, in one signaling installation under construction on 25 miles of multiple track, 145 miles of line wire will be saved. •Furthermore, since longer track circuits may be operated with coded control than is generally possible with steady energy track circuits, cut sections are seldom necessary even with the longer signal spacing required for present-day high speed traffic. An overall saving of material is thereby accomplished, which is important now, but which will also produce economy in maintenance in the years to come.

20

UNION SWITCH & SIGNAL COMPANY

SWISSVALE, PA.

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

The Week at a Glance

WORKS ITS DIESELS: The Susquehanna gives little rest to its Diesels (switching type, but adapted also for road work). As a short article herein reveals, it has even sandwiched a couple of runs of a suburban passenger train into the 24-hour program of one of these jobs—which also does road freight hauling and switching. Eight Diesels have replaced 13 steam locomotives.

●

FUEL THRIFT TO CEASE? In wartime, is it reasonable to insist strongly on fuel efficiency? The Great Western's S. M. P., T. Olson, in an article herein argues persuasively in the affirmative. He accepts present equipment—that is, it has got to be used, where traffic requires, even if it does burn lots of fuel. But, admitting the priority which performance must take over economy, the author holds that a saving of 5 per cent in locomotive fuel is possible—and that this will save transportation and add to the supply of open-top cars. A provocative paper for thoughtful railroaders. Besides, if fuel education isn't stressed, with so many inexperienced employees, present fuel efficiency might deteriorate.

●

QUEST FOR RAIL: A large meeting was held in Chicago last week, and is reported herein, at which WPB officials and railroad officers thoroughly canvassed the situation regarding the scrap and relay rail the government wants the railroads to find. Similar meetings have been held at other points, but this was the biggest one and our purchases and stores editor records the discussion in detail—as revealing what, precisely, the program is; and typical railroad response to it. There are some unproductive branch lines which are going to have to give their all to their country, because 40,000,000 linear feet of relay rail is wanted, in addition to 50,000,000 ft. the railroads have already supplied.

●

MAKING CUT-OFF PRODUCE: A single-track 28.6-mile freight cut-off around Youngstown (saving 11 miles) was used by the Erie to move 18 trains a day, in both directions. Centralized train control, power switches and modern signals now pass 28 trains a day (as recorded herein)—and 10 minutes running time, on the average, has been clipped off of each train's schedule. What the railroads are doing today seems, from the statistics, like a miracle—but there are countless substantial causes (like this Erie instance) to explain what, in the aggregate, suggests necromancy to the uninitiated.

●

40 PER CENT OVER '29: Net ton-miles in April achieved a record—40 per cent over April, 1929, and 11 per cent over October, 1941, and March, this year. This enormous freight performance has been secured by greatly increasing the intensity of use of everything on the railroads which has wheels on it—including many vehicles which, normally, would have been scrapped. Nothing can keep this equipment on the job except an intensive repair program and, as the leading editorial herein again emphasizes, the government authorities are not providing materials in sufficient quantity to sustain the program of essential maintenance.

●

ENDING POOR-PAY TRAINS: How additional passenger equipment can be furnished where it is really needed—by curtailing poorly-patronized runs in areas adequately served by bus lines—is suggested in an inquiry by the Illinois Commerce Commission, reported in the news pages herein. The railroads in that state are seeking to discontinue some 70 dispensable runs—and, if the regulatory authorities will permit them to do so, they will thereby release 21 locomotives, 11 motor trains and 62 passenger train cars for useful service.

●

FUNDS FOR STUDY BOARD: The Transport Study Board was up before the Senate appropriations committee this week—and made an impression sufficiently favorable to secure a recommendation from the committee about twice as large as the Budget Bureau asked for. Senator McKellar, as heretofore, took a lively interest in the Board's study of interterritorial freight rates (an inquiry undertaken, largely, because he insisted upon it)—and disclosed a considerable degree of certainty as to what the Board's findings will be. If the Board reports otherwise than that the present rate set-up is discriminatory, then its revelation will "not be worth two bits"—in the Senator's opinion. Board Member Childe told the Senator that his group will point out to Congress what needs to be done "to correct the situation."

●

ORDNANCE CONSERVES CARS: A freight car is a war weapon—which makes possible the production of all the other weapons. The man who delays or lightly loads a freight car, unnecessarily, is hindering the effectiveness of our war effort. Careless handling may be as destructive to a car and its contents as if one of Hitler's shells hit it. Such statements are being issued by the Army Ordnance Department in a car-conservation campaign—showing that arm of the forces understands why it is necessary to "keep 'em rolling," and how.

●

FREIGHT CAR APOTHEOSIS: The weekly magazine "Alabama" for July 10 adorns its front cover with a photograph of Alvin Vogtle, president of the National Association of Shippers Advisory Boards. The distinguished Alabaman is shown seated at his desk with a model freight car in his hands and (we note with satisfaction) a copy of *Railway Age* before him. In the magazine an article tells of the remarkable performance of the railroads, in cooperation with their customers, and publicizes the slogan *"the freight car is a weapon for freedom, which makes possible all the other weapons we must have."* With transportation efficiency so dependent upon voluntary action, publicity for transportation facts is a necessary adjunct to accomplishment—a situation which, fortunately, the Shippers Advisory Board head so well understands.

LIGHT UNDER A BUSHEL: The Missouri Pacific has placed its "Colorado Eagles" in service without any fanfare of publicity—not because they didn't deserve it but because the Washington view apparently is that the public needs conditioning to deprivation in passenger service; letting them know of service improvements might mitigate the course of discipline to which they are (in many cases necessarily) being subjected. An editorial herein questions the wisdom of official gloom on the passenger capacity situation, except where conditions justify it. There is nothing inherently shameful in hauling people faster and more comfortably (arrangements to do so having preceded our entry into the war). It is suggested that authorities domiciled in the District of Columbia may be diagnosing nation-wide passenger congestion from what they see in the Washington Terminal.

●

TRANSPORTATION TAXES: An industry put down for heavier taxation is at a disadvantage in resisting it—because its opposition will be suspect as springing from self-interest rather than patriotism. The proposed levy on for-hire transportation, however (to which an editorial herein draws attention), has drawn more fire from Price Administrator Henderson than from the transportation industry—and his motive, certainly, cannot be ascribed to concern for corporate business. This impost, if laid (unless a compensatory levy is made on private transportation), will seriously disadvantage for-hire carriers in the competitive era following the war. Thereby, it will foster monopoly—which one branch of the government is now so strenuously opposing. A wise decision cannot be made on this transportation levy unless the public is given more facts on its economic consequences *to them* than they yet have.

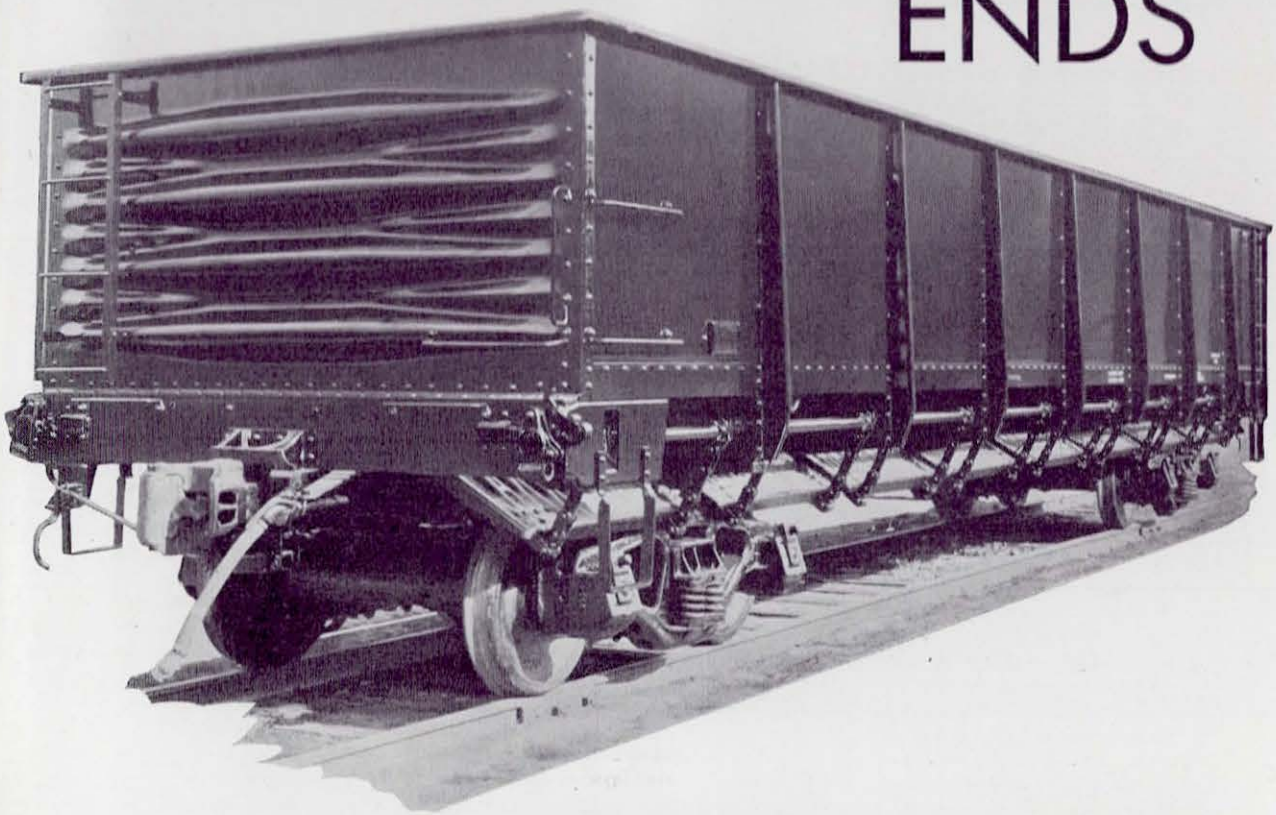
●

700 WAYS TO SAVE: Railroad standard practices in the use of new—and the discarding of old—materials have been thoroughly combed over; result, 700 different recommendations have been developed and distributed for the conservation of materials. So goes a report from the A. A. R., which further reveals that the hints for thrift in materia's have been worked out by its P. & S. division, collaborating with the Mechanical and Engineering divisions (as is set forth in the news pages herein). The recommendations cover practically every item used by railroads—particular attention being paid to economy in applying such products as rubber, including advice as to how to put all scrap to effective use. From paper clips and paint brushes to rails and locomotive axles, conservation methods have been developed and are being actively forwarded.

●

OIL SLIGHTLY SLOWER: In the July 4 week-end the railroads hauled 720,510 daily bbl. of petroleum products to the Eastern seaboard—being a couple of hundred bbl. less than in the preceding week, which contained no holiday.

DREADNAUGHT ENDS



CUSHION SHOCKS DUE TO SHIFTING LOADS AND PROTECT THE SUPERSTRUCTURE

PROVIDE UNIFORM STRENGTH OVER THE ENTIRE SURFACE

Cars must be rugged because of increasingly heavy loads and greater speeds.

Rigid end gondolas with DREADNAUGHT ENDS are rugged at a vital point.

STANDARD RAILWAY EQUIPMENT MFG. COMPANY

HAMMOND, INDIANA

WORKS: HAMMOND, INDIANA NEW KENSINGTON, PA.

CHICAGO OFFICE — 310 S. MICHIGAN AVE.

RAILWAY AGE

Risking a Transportation Shortage

As statistics for April straggle in from various sources, they indicate that in that month alone almost every previous record of railway operating efficiency was broken. Although annual traffic peaks are reached in the fall, and April has only thirty days, the volume of freight service rendered in that month exceeded all previous monthly records.

It was 54 billion net ton-miles, as compared with 51 billion last October and 52 billion in March of this year—an increase *per day* of 11 per cent over these previous record months, and of *40 per cent* over April, 1929. Averages of 101.5 miles traveled daily by each locomotive, of 46.6 miles traveled daily by each freight car, of 52.4 cars per train, and of 1,006 tons of freight per train, were all new records.

Consequently, on the average, each locomotive, car and train rendered more hourly or daily service than ever before. Ton-miles per car per day of 894 exceeded any previous April record by 60 per cent and the previous high monthly record made last October by 5 per cent.

The success of the railways in attaining these remarkable results, in spite of their inability, because of government failure to provide materials, to get a large part of the new locomotives and cars they ordered, continues to be largely due to rapidly repairing equipment which until recently it would have been considered desirable, or even necessary, to scrap. In April they had 21,915 freight locomotives—actually fewer than in January, 1941; but while 5,094, or 23 per cent, needed repairs in January, 1941, only 3,119, or 14 per cent, needed repairs last April. This was the smallest percentage in history of the total number needing repairs, and its reduction since January, 1941, increased the effective supply of locomotives by 1,975. Nevertheless, there were only 688 locomotives "stored" in serviceable condition in April—a decline of 69 per cent since April, 1940, of 54 per cent since April, 1941, of 18 per cent since last October, and the smallest margin of safety of this kind in history. While the increase between April, 1941, and April, 1942, in the number of railroad-owned freight cars was about 101,000, the increase in the total number in serviceable condition was 136,000, the difference being due to reduction of the number in bad order from 5.9 per cent to 3.6.

The figures emphasize once more not only a continuing increase in efficiency of operation, but if a shortage of transportation is to be avoided in 1943—or even in 1942—the imperative need of more materials for maintenance of present equipment and facilities and for early provision of new equipment and other facilities. The traffic being handled, the speed with which it is being handled, the consequent strain and wear upon all facilities, are entirely unprecedented. Nobody knows how long the war will last or how much demands upon the railways will further increase.

Meantime consumption of materials by the railways is increasing, while deliveries of materials to them are declining. Is it in the national interest to continue thus taking the chance of a shortage of transportation that would be due solely to denial to the railways of only a *small percentage* of the scarce materials required for essential civilian and war purposes?

Taxing Transportation

The railroads and other carriers-for-hire are fortunate in the opposition of Price Administrator Henderson to an excise tax of 5 per cent on freight transportation. The carriers could not strongly oppose such a levy without the suspicion of being motivated by self-interest rather than public interest. No such criticism can apply to Mr. Henderson. No one has detected in him much regard for corporate enterprise, and he proclaims himself a "100 per cent New Dealer." Among the sound objections offered by him to this impost are:

It would discriminate against producers of commodities of which transportation costs are a large part of the selling price (such as products of agriculture and mines).

It would change the competitive relations of concerns producing the same commodities in various areas of the country, to the advantage of those reaching their markets by shorter hauls.

No industry or individual can complain in these days of being taxed to the limit of ability to pay. But a tax which is discriminatory, and hence disruptive of natural economic processes, not only injures the taxpayers discriminated against, but is contrary to the public welfare, the protection of which is the only justification for taxes. Such a discriminatory tax as that proposed being plainly a "trade barrier," why should the federal government destroy ostensible state "trade barriers" and then erect real barriers itself? The transportation industry should not protest against any taxation not inimical to efficiency. It can and should endeavor to make known the facts as to the probable effect of tax programs sure adversely to affect efficiency in transportation and the nation's productive efficiency.

One point especially needs more emphasis than it has yet been given, e.g., if an excise tax is to be levied on *for-hire* transportation, then an equal and compensatory tax should be levied on *private* transportation. There is plainly no good reason why, when a producer hauls his products in his own trucks, barges or pipelines, such transportation should not be taxed at the same rate as if the goods were hauled by a common or contract carrier. Unless this is done, common and contract carriers, and the shippers they serve—a vast majority, including most small shippers—will be placed at a disadvantage compared with those providing private transportation for themselves only, and the tendency will be for increasing traffic to be diverted *artificially and uneconomically* from for-hire carriers to private carriers.

There is no influence in this country tending more directly to build up *monopolies* than the increase of private transportation with government encouragement and aid. Why should government attack monopolies under the anti-trust laws and help by other means to create them? When all carriers are operating at or near capacity, influences tending to divert traffic from one to another may appear unimportant. But traffic due to war probably will decline before war-time taxes do; and discriminatory, uneconomic and monopoly-fostering levies continuing in the post-war period will be more effectively unjust than now, and a brake on the economy when business will need every form of stimulation suitable to private enterprise. Economically unsound excises proposed now should have considered their probable effects not only during but after the war.

Obeying Orders

On Sunday, June 21, the "Colorado Eagles" of the Missouri Pacific began their first runs out of their terminals at St. Louis and Denver, respectively. These bright and glistening new streamliners consist of a 2-unit, 4,000 h. p., Diesel-electric locomotive; 1 mail car; 1 mail-baggage car; 2 coaches; 1 diner-lounge; and 2 sleeping cars. They were ordered more than a year ago, and were well on their way to completion before the war began or any shortage of materials developed.

Instead, however, of the fanfare that has usually accompanied the "launching" of new streamlined trains, the Colorado Eagles were placed in operation with no ceremonies. The Missouri Pacific thus complied with the suggestions of the Office of Defense Transportation to discourage unnecessary travel. No press releases were issued announcing the new service, and the few advertisements published stated simply that, on June 21, the Colorado Eagle would supplant the Scenic Limited. No mention was made that it was a new train, or a streamlined train, and its faster schedule was indicated only by the times shown for arrival and departure at St. Louis and Denver. The appeal of a modern, streamlined train is such, however, that the first Colorado Eagle left St. Louis with every seat taken and 30 passengers standing in the aisles.

Here, then, we have a picture of the inauguration of a new passenger train under wartime conditions. The suggestions of O. D. T. were unquestionably issued in good faith, but were based, perhaps, on observation of the congested stations and crowded passenger trains in the vicinity of Washington, Philadelphia and New York, rather than on the materially different conditions existing west of the Alleghenies. Does not the playing down of a development of such wide public interest and benefit indicate that, perhaps, we may be becoming a bit too hysterical in carrying on the war?

These new trains have a very definite place in civilian as well as war service. They have released several cars and locomotives of the so-called "standard" types for other service, including all-important troop movements. They materially reduce the running time between two important terminals, often saving a business day for executives engaged in war work. They serve several intermediate cities in which there are many war production plants. They are being and will be used extensively by members of the armed forces. Because of their greater speed, they cause less inter-

ference to freight movement than the trains they replaced. And the essential transportation of men is as important to the war effort as the essential transportation of materials.

There are better ways of discouraging unnecessary travel than removing the means of travel, thus working hardship on those who must travel. To our way of thinking, there was no stigma attached to these new trains, of which the railway is rightfully proud; and the Missouri Pacific should have been allowed to broadcast their installation as a contribution to the civilian economy and the war effort.

Better Yards Will Help

Railway traffic men have sometimes referred to terminals as "graveyards" of freight cars. Although recent years have brought numerous refinements and improvements in the design and operation of yards, and many have been revised to incorporate new features, the length of time required for cars to pass through terminals is still an important factor limiting over-all efficiency. To the extent to which time lost in terminals has not been reduced to the practicable minimum, freight yards are "bottlenecks" in transportation, and, in the broader perspective, in the war effort as well.

A substantial part of freight yards still in use were laid out and built when demand for speed in handling cars was not as insistent as now, and, therefore, was not considered of paramount importance. Furthermore, as it became necessary to expand individual yards because of the growth of traffic, local conditions were often such that the new trackage required could be added only in such a manner as further to detract from efficiency. Therefore, in some yards the handling of cars is subject to delay because the arrangement does not permit adequate separation of different functions and movements.

Also, on some railroads the classification of cars is performed at several widely scattered points, at no one of which is the work done sufficient to justify the expense of constructing a modern classification yard. In many such instances probably the movement of cars can be expedited by centralizing classification work at a modern gravity yard built at some convenient point. Freight-yard obsolescence may also be present in other forms, as at some of the older gravity classification yards where grades, track arrangement or hump equipment have been out-dated by developments.

That the problem presented by freight-yard "bottlenecks" is receiving increasing attention is evidenced by the fact that there has recently been a quickening of activity in yard modernization. One road is bringing to completion an extensive yard rearrangement program at an important terminal, where it expects to effect a sizeable reduction in the time required for handling cars. Another railway, on which certain classification work was formerly done at scattered locations, has centralized it at a single new classification yard, thereby realizing substantial benefits. Several other large-scale yard modernization projects are just getting under way.

Railroads that have not yet done so may find it highly profitable to scrutinize their older freight terminals to determine whether the present layouts and facilities are conducive to the highest efficiency. Such analyses may indicate the need for extensive re-arrangement and modernization; on the other hand, important benefits may be derived from a few relatively simple changes in existing trackage. Not only will projects of this type prove a valuable contribution to the war effort, but the advantages derived will obviously carry over into the post-war period. The ability to handle cars through terminals with maximum efficiency will then be an important factor in helping to meet the keener competition that seems inevitable.

War "Control" to End with the War?

"Director Charles W. Eliot of the National Resources Planning Board says it will be necessary to continue in peace many war-time government controls to 'prevent runaway prices and to assist in orderly demobilization of the war machine.' In the next breath he says private enterprise must continue or 'we as a people will find other ways to organize venture or developmental capital.'

"If war-time controls continue in peace private enterprise, a big part of the American way of life, is done for. The control bureaucracy is one of the necessary evils of war; if we foolishly give it the job of 'orderly demobilization of the war machine' it will never demobilize itself. Did any administrative body, clothed in a little brief authority, ever ask for anything but more power and more money? . . .

"The length of an officeholder's experience in public affairs can be judged fairly accurately by the color of his politico-economic opinions. The late Senator Cummins of Iowa was at one time a believer in government ownership of railroads. Near the end of his useful career he said that he had become convinced that the government should not own or operate the railroads, 'for reasons inherent in human nature, yours and mine.' But men who have served for a little while in some public capacity spring forward with schemes of political or economic organization sure, in their opinion, to work better than that which has developed in use through more than a century of American experience.

"Mr. Eliot's 'or else' proposition is clear. Private enterprise must remain and must function under wartime controls made permanent, or the country will go totalitarian. Whereas every plumber knows that private enterprise can live and flourish only in freedom under law—freedom from the discretionary managerial authority of government placeholders who have no responsibility for the results of what they do. . . ."

From the Wall Street Journal

Railroads Heed the Nation's Plea

Consider quotas and use of war powers to get 4,000 more miles of tracks for Army and Navy—Intensify cleanup drives

THE railroads are ready to go the limit in meeting the Nation's need of scrap iron and will graciously submit to the broader use of the war power of the government to seize or threaten to seize property to produce the additional rail required by the Army and Navy, it was indicated at the conference about scrap and rail which was held between spokesmen of the war agencies and the railroads in Chicago on July 10.

This conference was one of five conducted by the Railroad Salvage Section of the War Production Board in five cities during the past two weeks to increase the production of railroad scrap and to find out how to get 40,000,000 more lin. ft. of relay rail from the railroads this year for military use. Similar conferences were held in New York on July 7, at Atlanta, Ga., on July 8, at San Francisco on July 13 and at Dallas, Tex., on July 18. The Chicago meeting was attended by 20 local and national representatives of the War Production Board, Office of Price Administration, Office of Defense Transportation and the Army and Navy in charge of specific relations with railroads and approximately 135 executives, engineers, supply officers and equipment and accounting officers of 72 railroads, together with representatives from the Association of American Railroads and the American Short Line associations. It was marked by. the informality and directness with which the uniformed and civilian services discussed the common problem. Ralph Budd, president, Chicago, Burlington & Quincy, was the conference chairman. In other cities, R. W. Brown, president, Lehigh Valley; E. E. Norris, president, Southern; W. M. Jeffers, president, Union Pacific, and M. S. Sloan, chairman, Missouri-Kansas-Texas, presided.

5,000 Miles of Rail in Six Months

Railroads, it was reported at the meeting, had delivered approximately 50,000,000 lin. ft., or roughly 5,000 track miles, of relay rail to the armed forces and defense industries during the first six months of this year, of which 20,000,000 ft. was delivered prior to April 30 and 30,000,000 ft. during May and June. This rail exceeded by about 1,200 track miles, or 30 per cent, the approximate amount of relay rail which the railroads were to have released during the entire year in exchange for 1,260,000 net tons, or approximately 6,400 track miles, of new rail, although the railroads received only about 700,000 tons, or 55 per cent, of the new rail up to June 30. The rest of the new rail, according to present plans, is to be furnished to railroads at the rate of 125,000 tons per month, with the northern roads getting up to 90 per cent of their requirements in time to lay while the weather permits.

Relay rail released by railroads for military purposes from July 1 has not been enough, however, and 40,000,000 more feet, or roughly 4,000 more track miles, of this rail, exclusive of scrap, must be released, thus bringing to 9,000 track miles the amount of relay rail which the railroads will be expected to release to the Army, Navy, Maritime Commission and defense plants and industries this year. In addition, the railroads must intensify salvage drives to produce more scrap rail and more iron and steel scrap of all kinds in the interest of the war effort.

Ralph Budd told the conference that the railroads have been in the war business longer than anybody else and need no prodding to do their part but require only to be told what is expected of them to obtain their full co-operation. All railroads, he said, must canvass their properties to make sure that more old material is not being kept in stock than is justified under present circumstances, and each company must now lean strongly to the side of reducing the number of second-hand structures, as their elimination will produce surprisingly large quantities of scrap. While every railroad, he said, is organized for handling scrap, the present situation calls for more intensive work. He explained that the roads are now producing less scrap from rolling stock as a

for Rail and Scrap

Launching the Drive at Chicago for Railroad Scrap and Rail

Front Row, left to right—C. E. Johnston, ODT; S. Ewing, OPA; B. C. Bertram, Railway Director of Salvage, WPB; Ralph Budd, President, C. B. & Q.; A. Miller, WPB; G. F. Graham, WPB; and Maj. M. T. Dyke, U. S. Army. Second Row, left to right—in uniform—Capt. H. A. Taylor, Lt. Com. W. A. Duckhan and Com. O. L. Carlson, U. S. Navy.

result of decisions at the outbreak of the war to keep old equipment in service as long as possible, but, as soon as this equipment becomes wholly unserviceable, he said, it should not be left standing but the material which can be used on other cars should be reclaimed and the balance scrapped promptly. A constant search should especially be made, he added, for tracks that can be taken up and this search should include tracks owned by industries as well as those owned by railroads.

Action on Abandoned Lines Urged

The railroads must produce the second-hand rail for defense plants and industries, the speaker observed. Railroads need the new rail and the Army and Navy are co-operating to let the railroads have it by waiving former practices of building tracks of new material and adopting the plan of using old rail. If railroads fail to furnish old rail, the war agencies will be compelled to demand new rail and thus reduce the new rail available to the railroads. Abandoned lines, he said, are the main source of this rail and will produce ample rail for all requirements.

While the railroads have not been idle in abandoning unproductive lines, as shown by the reduction in mileage of the railroads from a maximum of approximately 260,000 to 240,000 miles and have many applications pending before railroad commissions for further abandonment, the machinery for removing track under the laws regulating railroads, he stated, is cumbersome and, in the face of objection from local interests, including labor unions, the railroads have not been permitted to abandon many lines which would produce large quantities of track material satisfactory for military use. The Interstate Commerce Commission, he said, has already agreed to expedite such hearings, but it was the speaker's opinion that all applications for abandonment should now be carefully reviewed.

A calculation indicating that 40,000,000 ft. of rail is roughly equal to 2 per cent of the present railway mileage, the speaker suggested that this might be the basis of determining how much relay rail each road should furnish, and added that the Burlington would underwrite 2 per cent of its mileage for the purpose if it could get the consent of the government to remove it.

Com. O. L. Carlson, chief of allocations and priorities of the Bureau of Harbors and Docks of the Navy, paid tribute to the railroads for their co-operation in

obtaining material, but reminded the conference that the need of the armed services for rail is tremendous and that the Army and Navy not only must get it, but will get it, and added that if the government is blocking efforts of the railroads to produce the rail, the Navy will do something about it. Of the 30,000,000 lin. ft. of relay rail delivered to war agencies by railroads during May and June, he explained, approximately 13,000,000 ft. was delivered to the Army, 7,000,000 ft. to the Navy, 2,000,000 ft. to the Maritime Commission and about 8,000,000 ft. to defense plants and industries. For the most part, the requirements of the Navy extend to rail of 80 lb. and over, while the lighter rail is better suited to the Army. Relay rail now on order by the Navy, he said, will be used at the rate of 2,500,000 ft. a month during July and August of this year and then taper off each month to an estimated consumption of 384,000 tons per month during the latter part of 1943.

More Orders in Sight

In reporting new rail, which the railroads will receive this year and the relay rail which they must deliver this year, D. F. Graham, rail specialist of the Transportation Branch of WPB, regarded as remarkable the showing of the railroads in the aggregate in meeting all the requirements of the armed forces for relay rail to date, but warned the railroads that even present estimates of the new requirements of the armed forces for the rail might be exceeded. Centralizing the allocation and distribution of all new and relay rail and revising regulations over rail taken out of track laid with new rail, to allow as little as 15 per cent to be released in the first thirty days, followed by 15 per cent in the next thirty days, 40 per cent in the succeeding thirty days and the balance at any time within 150 days, have simplified the problem for the railroads, while the control now in effect over distribution to prevent projects from receiving more rail than is actually needed has also been effective, he said.

B. C. Bertram, director of railroad salvage, WPB, expressed his confidence in the ability of the railroads to do voluntarily the job which has to be done on each road without the help from an army of men appointed to police the properties, but was disappointed that all roads have not yet appointed salvage directors as requested and pleaded with the railroads to waste no more time in the effort. With docks piled high with war materials waiting for ships that do not exist, he said, things have got to be done and the only way to do the job is to go out and do it. The former supervisor of locomotive operation on the Lehigh Valley referred to many yards he had seen with only two or three cars in them, to pictures he had taken or received disclosing "glaring cases of unused railway facilities," including recent pictures of four miles of track with trees growing between the ties, to records of other tracks which had long been disconnected from main lines and to other "glaring evidence that railroad men are being misled about conditions on their own railroads," and urged railroads to adopt the policy that if material or track is not needed today it will not be needed in the future.

C. E. Johnston, chairman of the Western Association of Railway Executives and associate director of the Office of Defense Transportation, who relieved Mr. Budd as chairman of the conference, indorsed the proposal to apportion the amount of relay rail among railroads on a percentage basis and suggested its adoption as a means of getting action. Mr. Bertram, however, did not think it would work, explaining that some roads have been doing a yeoman's job in releasing rail but that other roads have been laggard, and adding that these roads are known and will be expected to take a more aggressive interest in the work. He took a favorable attitude toward the proposal, however, when Commander Carlson suggested that the rail already released by each road could be included in arriving at quotas.

The announcement from A. P. Titus, president of the Illinois Terminal, that this road was ready to abandon two interurban lines containing approximately 160 track miles of rail averaging 70 lb. to the yard, together with considerable copper and lumber, added fuel to the interest of the conference in abandonments.

Mr. Bertram announced that he had invited Mr. Whitney, president of the Brotherhood of Railway Trainmen, to the meeting to discuss the union's attitude. He quoted the labor chief as saying that if the railroads were really going after scrap the trainmen could tell them where it could be found and stated that he had subsequently received stacks of letters disclosing the locations of railroad scrap. He expressed the opinion that labor's attitude has changed and that numerous abandonments could now be made without objections from labor unions where the need of getting war materials from them is a paramount consideration. He added, however, that the salvage section of WPB now has a special project section in charge of J. W. Bertch, which devotes its entire time to abandoned properties and asked the railroads to notify this section of facilities which could be retired or of any difficulties encountered in expediting their abandonment.

Navy spokesmen did not recall any projects under requisitioning at present and Army spokesmen reported only three such projects, and it was explained that the armed forces have been reluctant to become involved in projects which have more material than is wanted for specific purposes. It was also explained that the role of the armed forces in requisitioning procedure is limited to certifying that the materials are needed, leaving it up to the War Production Board to obtain it. Only the War Production Board, said Mr. Bertram, has the authority to demand the material from its owner.

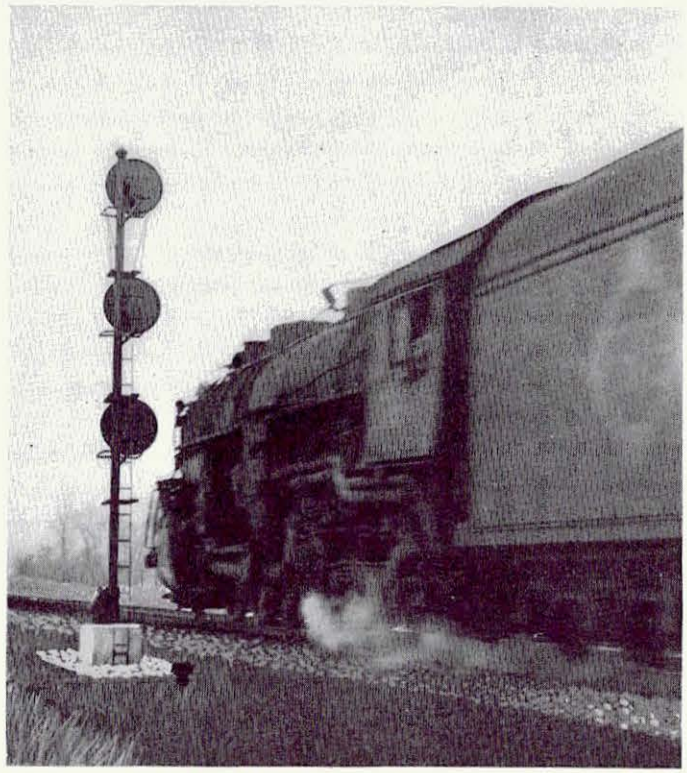
Prices for relay rail were troublesome last fall when as many as five agencies in the Army alone were competing for it and as much as $72 a ton was paid. However, price regulations and interpretations which have since been made, it was explained by Samuel Ewing of the Office of Price Administration, have corrected the abuses and relieved the railroads from uncertainty in disposing of the material. These regulations unify the price of the rail and distinguish between different classes of rail by the use to which they are put.

C. H. Buford, vice-president, AAR, agreed that there ought to be some better way of handling abandonments and stated that the AAR keeps a man in the ICC practically all the time on abandonment proceedings, but about all the action gotten out of the ICC with most cases is the answer that the Commission "will handle as rapidly as possible." While the railroads are constantly being pressed for relay rail, he said, the Army and Navy need only to tell us what rail they want and we will get it. He did not think that any defense plant work has been delayed up to the present by the failure of railroads to produce rail, but reminded the spokesman of the armed forces that it is a physical impossibility to produce all the rail required by them at once and emphasized that the Army and Navy must, on the one hand, avoid ordering more rail than is required and,

(Continued on page 95)

C.T.C. Puts More Trains Over An Erie Cut-Off

In spite of increased traffic, the train time has been reduced on a single track-freight line 28.6 miles long



The C.T.C. Permits Trains to Keep Moving at Closer Spacing

THE Erie has increased the track capacity of a single-track cut-off, 28.6 miles long, between Leavittsburg, Ohio, and Pymatuning, Pa., by installing centralized traffic control, including power switches and signals for authorizing train movements to replacing manual block, thereby permitting following trains to be spaced more closely with safety, eliminating the necessity for stopping trains when entering or leaving passing tracks, and increasing the average speed through industrial areas where yard limit rules were previously in effect. Practically all through freight trains pass over this cut-off, while the passenger trains as well as certain freight trains are routed over a double-track line, 11 miles longer, that passes through Youngstown.

Previously the cut-off handled about 18 freight trains daily, which has now increased to a total of about 28 trains daily. In spite of this fact, the average train time on the 28.6 miles is now 10 minutes less than prior to the installation of C. T. C. Furthermore, the C. T. C. has so increased the track capacity that two through freight trains that were previously operated via Youngstown are now operated over the cut-off.

Character of the Line

For the most part the cut-off has a rolling grade line with short grades ranging up to approximately 1 per cent. From Latimer, the grade ascends westward for three miles to the center of the siding at Johnsons on a maximum grade of 1.05 per cent for approximately one mile and for the next five miles west it descends, with a maximum of 1 to 1.11 per cent for about two miles. There are only five curves, with a 1-deg. maximum.

At Pymatuning, a mechanical interlocking, "GH," includes the switches, crossovers and signals in the junction layout. At Latimer, a mechanical interlocking, "MR," protects a crossing of the Erie with the New York Central. In the east part of North Warren, a mechanical interlocking, "WN," protects a crossing of the Erie with a double-track line of the Pennsylvania. In Warren, another mechanical interlocking, "BO," protects a crossing with a single-track line of the Baltimore & Ohio.

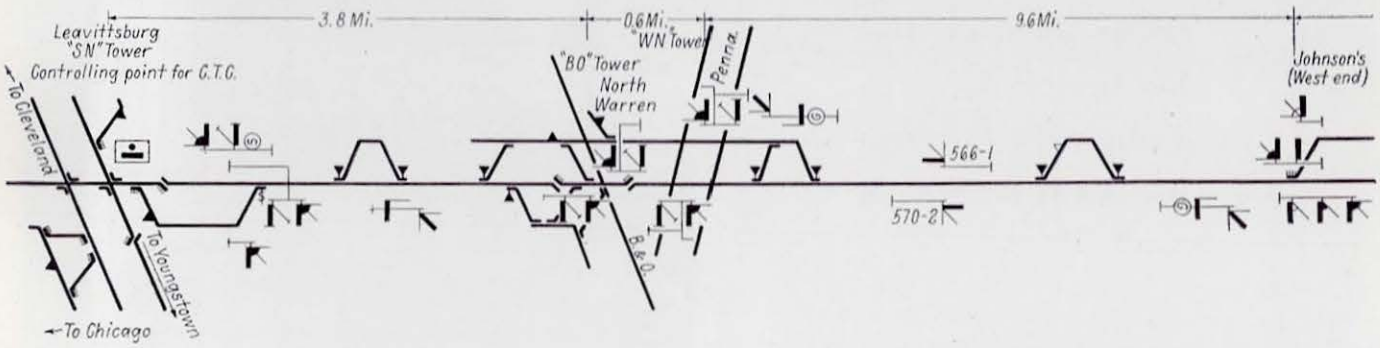
At Leavittsburg, a mechanical interlocking, "SN," includes the signals and track layout at the junction of the two lines eastward to Pymatuning, as well as the main line west to Chicago, and the main line north to Cleveland. The control machine for the centralized traffic control between Leavittsburg and Pymatuning is located in the tower of the "SN" interlocking at Leavittsburg.

Prior to the recent program, no automatic signaling was in service on this territory, and train movements were authorized by manual block with block offices at "SN," "BO," Cortland, east end of Johnsons, Latimer, Burghill, Orangeville, and "GH." Yard limits were in effect through the various towns and switching areas, and through trains were required to operate under yard limit rules, prepared to stop short of switching moves being made on the main line. Means for advising the switching crews of the approach of through trains was limited. This circumstance was an important factor, because, in the industrial area in North Warren, switching crews work 24 hours a day, three crews being on duty the first shift and two on the second and third shifts.

On this territory, only two passing tracks are used in the regular operation of through freight trains. The west switch of the passing track at Leavittsburg is in-

cluded in the "SN" mechanical interlocking, and a spring switch was installed at the east end of this siding, as a part of the C. T. C. project. In the previous arrangement at Johnsons, crossovers were in service between the siding and the main line, at a point about midway of the length of the siding. As a part of the recent program, these crossovers were removed, and the siding was lengthened to 8,200 ft., sufficient to hold two trains of average length. New No. 20 turnouts, with 30-ft. points were installed, and power switch machines were provided.

On this installation all the signals, including semi-automatic, automatic block and interlocking home signals, are of the searchlight type. At each end of the siding at Johnsons, where the power switch machines are used, a complete arrangement of semi-automatic signals is provided to direct trains to enter the siding, depart from the siding or continue on the main line. A track



Track and Signal Plan of the Centralized Traffic

circuit was installed on the passing track, and is used not only for the control of the signals governing movements to this track, but also the track circuit controls an indication on the C. T. C. machine to repeat occupancy of this siding.

Each of the station-entering signals has three "units."

Signals and Power Switch At Johnsons

The top unit governs through movements on the main track. Display of the Medium Approach aspect, red-over-yellow-over-red, Rule 286, indicates that the switch is reversed for a train to enter the siding, and that the siding is unoccupied. In this instance, the "distant" signal displays the yellow-over-green aspect, Rule 282A, which indicates that a train is to approach the next signal at medium speed. This use of signal aspects provides complete information sufficient to enable a train to be brought up to and through the No. 20 turnout at the speed for which it is designed. If only the Approach aspect were given on the "distant" signal, an engineman would, in such instances, be required, according to rule, to reduce to medium speed at the "distant" signal, and approach the station-entering signal prepared to stop.

If an eastbound train, for example, is occupying a part of the siding at Johnsons, the westward signal cannot be controlled to display an aspect to head an opposing train into the siding. On a station-entering signal, an aspect of red-over-yellow, Restricting, Rule 290, indicates that the switch is reversed for a train to enter the siding, but that the train is to proceed prepared to stop short of another train on the siding. In this instance, the "distant" signal displays the Approach aspect, just as it would if the station-entering signal were at Stop.

Take Siding at Spring Switch

The westward station-entering signal at the east end of the siding at Leavittsburg is a two-unit searchlight signal with a "take-siding" indicator attached to the mast below the second unit. This siding indicator is a lamp unit with a 16-in. frosted cover glass which, when illuminated, displays a large letter "S" on a black background. When a westbound train is to enter the siding, the operator codes a westward take-siding control which causes the take-siding indicator to display an illuminated letter "S," and timetable instructions require the train to stop at this signal and throw the switch to the reverse position, after which the take-siding indicator is automatically extinguished and the restricted speed signal is displayed for movement to the siding.

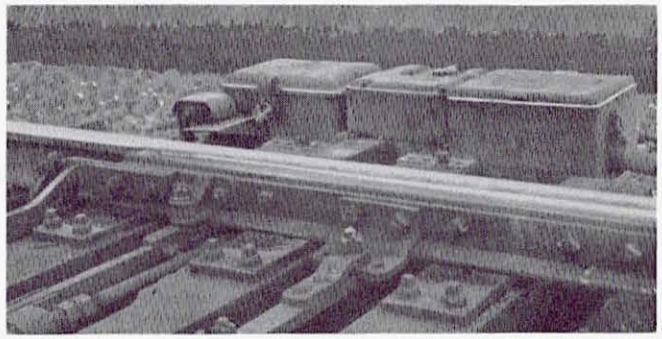
If an eastward train on the Leavittsburg siding is to be directed to depart, the leave-siding dwarf is controlled to display a proceed aspect, either yellow or green, depending on the block occupancy ahead. Then the train trails out through the spring switch, and departs.

In view of the fact that the station-leaving signals are semi-automatic, and normally display the Stop aspect, no two opposing signals can be cleared simultaneously, and intermediate signals were not required to provide head-on protection. The intermediate automatic signals were, therefore, based only on the requirements for spacing

following trains and to serve as "distant" signals for the station-entering semi-automatic signals. As a general rule, the "distant" automatic signals are located about 8,500 ft. to 9,000 ft. from their respective semi-automatic signals. Otherwise the intermediate signals were spaced for long blocks; for example, the block for signal 566-1 is about 4.5 miles.

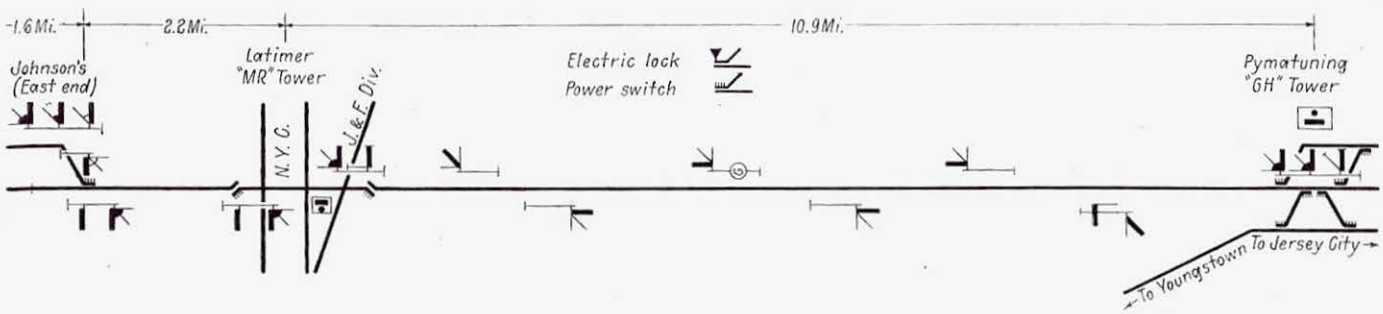
Electric Switch Locks

Eight of the main-track turnouts lead to rather extensive track layouts for serving industries. In the previous operating arrangement, yard limits were in effect on the main line through these industrial areas. The switching crews were allowed to occupy the main track or might move out onto the main track when a through train was approaching. As a result, the through trains



The Power Switch Machines Eliminate Train Stops

Erie, the major items of signaling apparatus being furnished by the Union Switch & Signal Company.



Control on 28.6 Miles Between Leavittsburg and Pymatuning

were required to reduce speed through these yard limits, prepared to stop short of cars or switch engines. The new system includes an electric switch lock on each of the main-line switches which leads to an industry track that is long enough for a switching train to get into the clear.

These eight switches were each equipped with a Type T-21 manually-operated switch-and-lock movement, including a facing-point lock and an electric lock, operated in connection with the normal position of the operating lever.

The C. T. C. Control Machine

The illuminated track diagram on the C. T. C. control machine has lamps which repeat the occupancy of all sections of the main track, as well as the passing siding at Johnsons. In addition, other lamps indicate when an overall station-to-station block is occupied, as for example between Johnsons and "GH" Pymatuning.

An automatic train graph, which forms a part of the control machine, has seven pens to repeat track occupancy of the various OS track sections at the switch locations, home signal limits of "BO" and "WN," etc. The sheet is completed at 8 o'clock every morning and sent to division headquarters as a train record.

A time coding system is used to send the controls to the various field stations and to return the indications. This system operates on two No. 8 hard-drawn copper line wires. A telephone circuit, super-imposed on this line, is connected to telephones in boxes at the various switches and to a loud-speaker on the C. T. C. control machine.

This centralized traffic control installation was planned and constructed by the signal department forces of the

Nation's Plea for Scrap

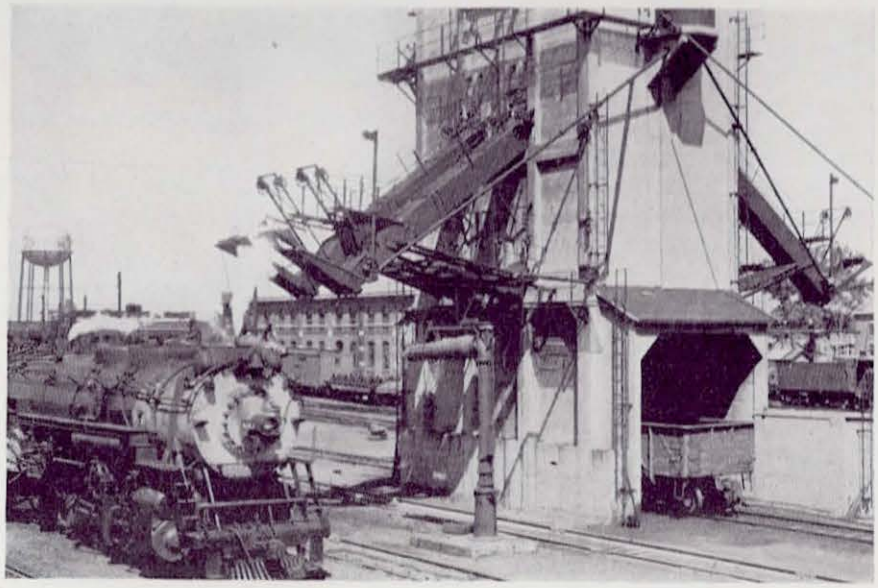
(*Continued from page 92*)

on the other hand, schedule their requirements so that rail need be furnished to each project only as required, thus assuring that one project will not go begging for rail while other projects receive more rail than they can use. Commander Carlson replied that this is being done in the Navy but that rail is one of the first materials needed on many projects because it is used for tracks to bring other construction materials to the work.

The Missouri Pacific has been particularly active in furnishing relay rail for defense projects and has also produced large quantities of scrap rail by taking out inside guard rails and taking up sidings. About 100 miles of rail has been produced in this manner and about 11,000 tons of rail were furnished to defense plants up to April 1. On the Burlington, special attention given last fall to the abandonment of sidings produced 969 gross tons of relay rail, 11,809 gross tons of scrap rail, 3,096 net tons of other track materials and 737 crossings, at a cost to the railroad of only $12,953 and a saving in taxes and other charges of $490,000. The Rock Island furnished 27,000 tons of rail to defense plants in 1941 and has produced 7,000 tons for this purpose so far this year, while salvage work this year has already produced 832 tons of obsolete material and 937 tons of bridge steel.

It was announced during the meeting that the Western railroads are considering a proposal to organize a scrap drive through the million employees of the railroads and their families. The interest in such a drive would not be limited to railroad scrap but to all scrap which could be collected by the employees in their position as citizens.

Is Fuel Economy a Legitimate War-Time Objective?*



The author believes it remains the barometer of all-around railroad efficiency—Is subordinate only to unimpaired movement of traffic

By T. Olson

Superintendent of Motive Power, Chicago Great Western, Oelwein, Iowa

THE subject of locomotive fuel economy is of such magnitude that at best we can consider only the more important points and those only in a general way. In endeavoring to determine whether or not it is important, the following questions may be asked:

(1) Is there now an opportunity for economy in the use of fuel on railroad locomotives?

(2) Is the economy that may be effected of sufficient value to be worth considering?

(3) Can economy be practiced in the use of locomotive fuel without impairment of the service which is expected from the locomotives?

(4) Is there any more need at this particular time to lay stress on this subject than there has been previously?

(5) Is fuel economy an up-to-date subject to the extent that it is possible to arouse interest in the issue among all concerned?

(6) How can railroad officers stimulate interest among employees to practice fuel economy?

(7) How can economy in use of fuel on railroad locomotives be best accomplished?

The railroad fuel problem embraces practically the entire group of executive, operating, engineering and mechanical officers and employees. It has relation to both equipment and man power and it would be difficult for anyone in any important position in railroad work to prove that certain responsibilities in connection with satisfactory fuel performance on the railroad on which he is employed do not rest wholly or partially on his shoulders. If railroad fuel is conserved it will benefit all, whereas if it is handled wastefully it involves a material loss to the railroads and a waste of natural resources badly needed in our war efforts.

Must Achieve Results with Present Equipment

Any practical study of fuel economy on locomotives must take into account present limitations, it being granted that train schedules are no faster than needed by competitive service requirements, that railroad lines cannot be readily changed at the present regardless of the fact that there may be undesirable grade conditions and curves which should be eliminated. While we may know that certain types of locomotives and certain equipment for locomotives would result in greater fuel economy, we should confine our attention at this time to accomplishing the greatest economy with the type of equipment we now have in operation.

J. J. Pelley, president of the Association of American Railroads, as reported in the *Railway Age* of March 21, 1942, said: "Fuel efficiency in freight service was never better than in 1941. Despite the increased weight per train and the increase that has taken place in the average speed of trains, the railroads in 1941 averaged 111 lb. of

* Abstract of a paper presented at the thirty-sixth annual convention of the Smoke Prevention Association of America, at Cleveland, Ohio.

fuel for the movement of one mile of 1,000 tons of freight and equipment. This average has never before been attained. For each pound of fuel used in freight service in 1941, the railroads hauled nine tons of freight and equipment one mile compared with 6⅕ tons in 1921, or an increase of 46.3 per cent."

Fuel Economy Not a Dormant Subject

Fuel economy certainly is not a dormant subject. We are going forward and we can and will continue to make further forward strides. A decrease in fuel consumption of 46.3 per cent in the course of 20 years is a good record. We must continue to perpetuate that good work.

There is frequently a tendency in abnormal times, such as we are now facing, to become possessed with the idea that we are in too much of a hurry to worry about details. In our efforts to handle heavy traffic, keep fast important train schedules on time, and eliminate delays, it is quite possible that, in the opinion of many, fuel economy should be overlooked and regarded as an unimportant detail requiring little consideration. The paramount duty of moving traffic, making of train schedules and avoiding delays must be recognized, but still there is no real need for becoming over-stimulated to the extent that we lose sight of fuel savings which can be accomplished without impairment to the service if proper co-operation is afforded.

The progress in fuel economy referred to was accomplished only to a certain degree by engine crews in charge of the locomotives. It was largely due to improvements in the design of motive power, refinements of equipment on locomotives, elimination of stops enroute, handling of more uniform and practical tonnage per train, and many other factors. A substantial and gratifying reduction has been made in locomotive fuel performance on a ton-mile basis by mechanical improvements and operating methods, to the extent that the ever-present opportunity for economy through education of the employees handling the work of moving the trains and operating the locomotives may have been neglected.

At present, with business on a high level and numerous men being inducted into the armed forces, we will necessarily be faced with inexperienced men in all branches of the railroad service. It cannot be expected that they will reach the state of efficiency that experienced employees have attained and it therefore becomes necessary now, and in the immediate future, to put forth greater efforts in educating employees in the art of fuel economy. The importance of fuel economy must be consistently kept before all employees or there will be an immediate slackening of interest. Therefore, I feel justified in saying that there is a greater opportunity at present and in the immediate future than there has been for some time past to save railroad fuel through educational efforts among the employees.

Possibility of 5 Per Cent Fuel Saving Suggested

The second question will answer itself by means of a few figures. During the year 1941, the cost of fuel used on railroad steam locomotives in the United States amounted to $238,076,588, representing 92,605,622 tons. Reports indicate that during the year 1941, there were 41,438 steam locomotives in operation in the United States, the average cost of coal for each locomotive in service being approximately $5,745. The percentage of this fuel that could be saved by comprehensive educational efforts among operating officers, trainmen, enginemen and maintenance forces in the roundhouses and shops would be difficult to determine. Most of you will agree that if everyone were on the alert and eliminated all preventable waste of locomotive fuel a 5 per cent reduction could be made, which would amount to approximately $11,903,829. Besides the immediate savings by the decreased volume required there would be other important advantages gained, such as release of man power required to mine the coal, and release of cars which would amount to approximately 90,000 carloads.

In connection with the third question, it is understood that railroads are not now operating with the primary objective in view of making an outstanding fuel record, regardless of how it effects the service provided. On the other hand, the economy sought is such as ought to be accomplished in connection with the proper meeting of all train schedules, quick turning of power, elimination of delays, increased engine runs, etc. We know that, under certain conditions, trains could be moved over districts or divisions, making a more favorable showing on the ton-mile basis, if train schedules were slower; this would permit handling of increased tonnage up to the most practical tonnage rating for economy.

Fuel Can Be Saved Without Impairing Service

In some instances, a more favorable fuel record could be made if more power were available and greater selection could be made of power units most suitable to fit each particular run or train to be handled. On the other hand, such cases are not sufficient to outweigh the benefits, in so far as fuel economy is concerned, that may be derived from conditions existing with tonnage at its peak, and usually the most favorable fuel performance is made when there is plenty of tonnage to handle with no surplus of motive power available which necessitates the quick turning of power and the greatest possible utilization of all motive power on hand. These facts prove to us that fuel economy can be practiced without impairment of the service. When there is a surplus of motive power available for the business to be handled, there is a tendency to keep in service more power units than are actually needed, resulting in low mileage per month and per day per serviceable unit, increased stand-by losses at terminals, and many other factors which make for an unfavorable fuel record.

When the practice of extended locomotive runs was first inaugurated to a greater or less degree, many men voiced opposition to it, believing that locomotive maintenance costs would increase, that locomotive life would be decreased, and that fuel consumption would mount. It was believed by many that the proper method of maintaining steam locomotives was to have the locomotive tied up at an enginehouse after it had made a run over a division or district, taking another locomotive out of the enginehouse which had been given routine servicing and attention. The pioneers in the movement for extended locomotive runs soon proved the fallacy of this theory. The weak points on the locomotives which had previously required attention at each terminal point were eradicated, and long engine runs were made with greater success as time went on, until today, it is common practice to run modern locomotives over several districts or divisions between each time they are tied up at a terminal point for roundhouse attention.

While a "cooling-off period" may be beneficial and save a lot of trouble when applied in connection with labor or other disputes, it is not so with steam locomotives. The less frequent the cooling-off and heating-up periods occur with steam locomotives, the longer the

power will last, with fewer bearing troubles, also fewer firebox and flue leaks. Present-day service requires long extended locomotive runs and this method of operation is favorable to a good fuel record, providing proper maintenance is afforded the locomotive which will permit it to function at maximum capacity throughout the entire run, regardless of its length.

To obtain the highest degree of efficiency from locomotives on extended runs, it is necessary that proper provisions be made for conditioning the boiler water enroute. The continuous automatic blow-off system has been of great assistance in this respect. It is also necessary to have grates so designed that the fire can be kept in good condition throughout the run, and if for any reason it becomes necessary to clean the fires while locomotives are receiving light servicing at intermediate points, which are usually fuel and water stations, grate and ash-pan arrangements should be provided which will permit conditioning the fires quickly, thereby preventing any drastic changes in firebox temperature.

The drafting of locomotives must be studied and arranged to suit the operating conditions. It is not practicable, in the present method of operation, to draft locomotives to suit individual engine crews or any single districts over which the locomotives operate. If the maintenance of locomotives is properly handled and they are efficiently drafted so that good fire conditions can be maintained to the end of a long run, there is a distinct fuel economy in long locomotive runs. There is still a great field for further economies when we analyze performance figures and find that the mileage per locomotive day on Class I railroads in the United States for the month of February, 1942, ranged from a high of 167.5 to a low of 46.2.

While waste of natural resources should not be permitted to occur, if there ever was a reason for strict conservation of resources of any kind, it is now, as suggested by our fourth question. It is our patriotic duty to save every pound of locomotive fuel that can be saved without impairment of the service. It has become necessary for the furtherance of the war efforts to make many curtailments of material, both for industrial and domestic use. We are ready to accept such restrictions in the fullest sense of co-operation, knowing that whatever inconvenience may be caused is, after all, but a small sacrifice towards the great cause which we are willing to, and must, support to the limit of our ability. There was never a time that the challenge of strict, thoughtful and intelligent conservation of railroad locomotive fuel should receive a greater response than at the present.

Need for Employee Education

Next to "Safety First," the second slogan which should be brought to the attention of new and old employees alike and kept constantly flashed on the screen depicting railroad operation is "Save Fuel." The slogan of saving fuel should be kept prominently before the locomotive firemen, enginemen, train dispatchers, train conductors, train brakemen, boilermakers, machinists, inspectors, carmen, in fact, all employees who have anything to do with the movement of the trains and the preparation and care of motive power and rolling stock. The saving of railroad fuel is not a one-man job. The fireman who controls the amount of fuel placed in the firebox may be handling his work as economically and efficiently as conditions permit. The fuel that he has saved, compared with a mediocre method of handling the work, can easily be wasted by the engineman through improper manipulation of the locomotive, such as working it at unwarranted long cut-off, thereby building up excessive back pressure in cylinders and while using an excessive amount of steam, not increasing the speed of the train, but on the contrary, retarding it.

On the other hand, the engineman may handle the locomotive in an efficient and capable manner, moving the train over the division or district with a minimum amount of steam consumption. His good work and the fuel saved by expert handling may be wasted through careless and inefficient work on the part of the fireman, such as improper and wasteful boiler feeding, steam wasted through the safety valves, low degrees of superheat steam temperature by reason of permitting fires to become banked in spots, improper fuel distribution and injudicious use of grates which may result in the fire bed being too thin at certain times and too heavy at other times, thus requiring additional fuel.

Officers and Department Heads Must Set Example

If both engineman and fireman handle their work in an economical manner, the saving that they have made through skillful work can easily be wasted by a hot box in the train or a hot bearing on the locomotive. With a slow order in the track, perhaps at the foot of an ascending grade, the additional fuel burned to regain momentum from the slowdown may more than equal the amount of fuel which could be saved in a trip by the most skillful engine crew.

Undoubtedly all irregularities which prevent the uninterrupted movement of trains are being investigated in one manner or another to develop the cause and if possible place responsibility. However, I do not believe that it is a common practice in connection with such investigations to refer to the amount of coal wasted by reason of the delay or irregularity in train movements. It should be made a part of the report and referred to when handling the case with the employees involved. If the slogan "Saving Fuel" is used intelligently and judiciously, there is reason to believe that we can arouse enthusiastic interest among all railroad employees.

In stimulating the interest of employees, as suggested in the sixth question, it is necessary that the leaders, or in this case the officers and department heads, set an example. It cannot be expected that any worth-while results will be obtained if numerous obstacles to fuel saving which could be eliminated are permitted to stand in the way. There must be some action to indicate that the officers or department heads are concerned about the success of the program.

For instance, if train and engine crews are fully determined to move the trains over their territories in a most economical manner and still are faced with unnecessary train delays, injudicious regulation of tonnage, poor planning of work enroute, excessive terminal delays, etc., they will soon begin to slacken their efforts and figure "What's the use, what we are able to save is wasted many times over in other ways and apparently nobody cares."

Engine crews who may be willing and capable of saving every pound of fuel possible are not likely to show continued keen interest if the locomotives are not properly maintained and prepared for them. If a locomotive is dispatched from an enginehouse steaming hard trip after trip due to leaky or stopped-up flues, leaky superheater units, excessive air leaks in the front end, valve and cylinder packing blows, etc., the crew cannot be expected to maintain keen interest in fuel conservation. In order to arouse and retain a lasting interest in

fuel economy it is necessary for railroad officers to watch the situation closely from all angles and take whatever action is necessary to eliminate carelessness wherever it exists. It is not sufficient to train one class of employees only. All employees must be trained to appreciate their own responsibility in order to obtain results. Briefly, it is necessary for railroad officers to have a thorough knowledge of the factors involved in saving locomotive fuel and then afford such supervision that wasteful or irregular practices are eliminated from all sources that will adversely effect a successful fuel economy program. If certain officers are assigned to specialize on fuel savings and fuel supervision, they must be afforded the wholehearted co-operation of the entire staff of railroad operating and mechanical officers in order to carry on their work successfully. If officers and heads of departments are vitally interested in the subject, employees will invariably follow along and do their part to the best of their ability.

The answer to the seventh question can briefly be summarized as follows: The interest in fuel economy will be most successful and effective if it is carried from the highest ranking officer on the road on down the line. An educational program must be carried on constantly to indicate by facts and figures the extent of fuel cost and the opportunities that are present for saving if fuel is used with strict economy. New employees should be instructed so that they will understand from the outset the importance of the subject. For example, it may look far-fetched to talk to a machinist apprentice or a callboy entering the service about fuel economy, but it is not amiss. If a mechanic performs a poor piece of work it will invariably result in failure, train delays and an excessive amount of fuel burned before normal operation is resumed. If a callboy neglects to call the engine crew on time, it will result in a hurry-up job of preparing the engine; perhaps something will be overlooked; and the trip will be started out wrong, resulting in several tons of additional coal being burned on this particular trip which could have been avoided.

It is generally recognized that the fuel record on a railroad is the barometer by which the efficiency may be judged to a great extent. Therefore, the best way to a good fuel record is through efficient railroad operation, a high standard of equipment maintenance and an effective educational program among employees.

Simplifying Interline Payments

Typing and clerical time are saved in system of forms developed by extensive investigation on Northern Pacific

By H. S. Latham

Assistant to General Auditor, Northern Pacific

A SYSTEM of accounting for interline traffic and car service balances has been perfected by the Northern Pacific, which is effecting large savings in typing and clerical time, when compared to the method heretofore used. The new method was developed deliberately—by an extensive investigation undertaken last fall to that end, and included examination of many alternatives, including the use of machine posting and punch cards.

Part of the savings of the new plan accrue from the use of draft list balance forms and part result from revision of our draft form.

Although the advantages of the forms will be apparent to anyone handling traffic and car service balances, a brief explanation might be helpful. Separate sets of similar forms are used for freight, passenger and switching (a portion of one sheet of the freight form being illustrated here), and a different form is used for car accounting data. The part of the car service forms which is similar to the freight, passenger and switching forms—but with lines closer and columns 3, 4 and 5 omitted—is detached to become the draft list balance form.

This form may be described as follows (column numbers referring to the accompanying illustration):

Column 1—"Code No."—Printed—These are the numbers used on interline forms as prescribed under mandatory freight accounting rules, with the exception of the four digit numbers. The code numbers are typed on drafts drawn.

Column 2—"Foreign Line Name"—Printed—Alphabetical order. A study of current freight, passenger, switching, and car service accounts was required to determine which names should be printed and how much space should be allowed for typing in the names of roads with which we seldom have balances.

Column 3—"Acct."—N.P.-F.L.—Printed—Indicates whether source of figure in Columns 4 or 5 is Northern Pacific or Foreign Line, interline report.

Columns 4 and 5—Filled in from interline reports designated in Column 3.

Column 6—"Balance due N.P."—Net of Columns 4 and 5, if receivable.

Column 7—"Balance due F.L."—Net of Columns 4 and 5, if payable.

Column 8—"Date settled" is filled in with a rubber dating stamp from treasurer's daily cash record of receipts and disbursements.

Column 9—"Remarks" is used to enter a memorandum of date drafts were approved for payment, and information such as "Do not draw," "Remits," "Make drafts 'with exchange,'" etc. Some of the remarks are printed.

Columns 4, 5, 6 and 7 are filled in by the departments which receive and forward interline reports. These departments forward forms with only Columns 6 and 7

N. P. 3609A

BINDING SPACE

TRAFFIC AND CAR SERVICE BALANCES

(1) Code No.	(2) FOREIGN LINE NAME	(3) Acct.	(4) FROM INTERLINE REPORTS Due N. P.	(5) FROM INTERLINE REPORTS Due F. L.	(6) BALANCE Due N. P.	(7) BALANCE Due F. L.	(8) DATE SETTLED (Cash Sheet)	(9) REMARKS
22	Atchison Topeka & Santa Fe Ry.	N.P. F.L.						
50	Baltimore and Ohio RR	N.P. F.L.						
	" " " " (Coal & Coke)	N.P. F.L.						
69	Boston and Maine RR	N.P. F.L.						
78	Butte Anaconda & Pacific Ry.	N.P. F.L.						
103	Canadian National Ry.	N.P. F.L.						
	N. O.	N.P.						
351	Illinois Central RR	F.L.						
357	Indiana Harbor Belt RR	N.P. F.L.						
	TOTAL							

TO GENERAL AUDITOR

NORTHERN PACIFIC RAILWAY COMPANY FREIGHT TRAFFIC BALANCES FOR_____

PAGE 1

Forms Similar to This (for Freight) Are Used for Passenger and Switching

filled in to the general auditor's office, where drafts are drawn and accepted and Column 8 is filled in.

The first two pages of the freight forms contain most of the large accounts, and are called the "advance list" because they carry most of the money subject to draft, and are completed a few days in advance of the others.

At the end of the month unsettled balances in Columns 6 and 7, as indicated in Column 8, are transferred to ruled sheets, used in printing the forms, and reconciled thereon with the general ledger accounts. These ruled sheets then become the sub-ledgers until the following month. This method permits the discontinuance of cumbersome ledgers and the posting of debits, credits and cash. Errors, declined drafts, and correspondence resulting therefrom have been practically eliminated.

The new method of writing drafts has resulted in further savings. All drafts are drawn from the forms described above. Only the code numbers from Column 1 and the amount from Column 6 have to be typed on the draft (as illustrated herewith). Code numbered addressographed plates are used to insert name and address. The code numbers of the plate appear directly under the typed code numbers to permit verification by inspection. A multiple roller rubber stamp is used to insert, in one operation, the date, month of account, and kind of service. The "one line" form of draft, even if entirely filled in by typing, produces a substantial saving because it eliminates time wasted in resetting the typewriter carriage.

The few minor problems which arose with respect to details of handling late accounts, Canadian funds, etc., were settled during the first month the system was installed. The savings from the innovation to date have already far exceeded the cost of research required to develop it.

FORM 3602

INTERLINE SETTLEMENT DRAFT

NORTHERN PACIFIC RAILWAY COMPANY

ACCOUNTING DEPARTMENT

No. 6162

NO PROTEST

ST. PAUL, MINN. Void

DATE AND ACCOUNT

JUL 1942 MAY 42 FRT

CODE PAY TO THE ORDER OF THE TREASURER OF AMOUNT

133 NORTHERN PACIFIC RAILWAY COMPANY $ 000.00

Rubber Stamp

Typed

TO TREASURER

CHICAGO BURLINGTON & QUINCY RR. 133

CHICAGO, ILLINOIS

Addressograph

GENERAL AUDITOR

Only Two Items Have to Be Typed on the Draft

Susquehanna Works Its Diesels 24 Hours a Day

DURING the past six months the New York, Susquehanna & Western has placed in service eight 1,000-hp. Diesel-electric road and switching locomotives to handle increased traffic and speed the movement of vital war materials while, at the same time, reducing operating costs. Six of the locomotives are used primarily in yard and road switching service. Four of this group are provided with multiple-unit control and, in road freight service with maximum tonnage, are coupled to operate as locomotives of 2,000 hp. The remaining two locomotives are designed so that they can also be used in suburban passenger-train service, having been equipped with the necessary gearing and high-speed trucks with longer wheel bases. All eight of the locomotives were built by the American Locomotive Company with General Electric electrical equipment.

The Susquehanna is believed to be the only road terminating on the west bank of the Hudson river on which road service is performed with Diesel power. A typical run of one of the passenger engines begins early in the morning at Butler, N. J. Upon arrival at the Jersey City, N. J., terminal (37 miles), the passenger cars are stored and the engine returns (10 miles) to Little Ferry freight yard to pick up a freight train destined for Green Pond Junction, N. J. (just west of Butler, the initial terminal), where a large amount of freight is interchanged with the Central of New Jersey. A return load is picked up at that point and brought to Little Ferry in the afternoon. The locomotive then proceeds to Jersey City to haul its passenger train on the return evening trip to Butler. At Butler it is placed in local freight service, operating between that place, Paterson (18 miles from Butler) and Passaic Junction, N. J. (21 miles), during the night and returning to Butler for the morning passenger run.

All eight of the new Diesel locomotives operate on a 24-hr. basis with four continuously at work in heavy-duty switching in the Edgewater, N. J., terminal and Little Ferry territory and handling coal trains in coal-dumper operations. As a result of the intensive utilization of the new locomotives, the railroad has been enabled to lay up 13 steam locomotives formerly used in road, switching and passenger service. It still continues to operate 17 steam locomotives in passenger and freight service.

The Susquehanna has been operated in trusteeship since June 1, 1937, under Walter Kidde, with its steam motive power leased from the Erie. About this time a curtailment of unprofitable passenger-train operations was affected and in July, 1940, a new service utilizing two streamline rail-motor cars was begun between Paterson and Susquehanna Transfer, at which point passengers leave the rail cars and take buses operated by the railroad through the Lincoln tunnel, under the Hudson river, to Times Square, New York. This new service was projected to regain a passenger business lost to motor buses for the entire route and has been so successful that the single unit rail-motor cars frequently are not able to handle the traffic alone. When the volume of traffic necessitates it, one of the new passenger Diesel locomotives will be put into this rapid transit service hauling two or more coaches.

As yet, the new Diesel-electric locomotives have required only ordinary running inspection and repairs. A three-stall portion of the Little Ferry roundhouse has been set aside and equipped with a 7½-ton capacity overhead crane to do any heavy lifting that may be required in repairing the motors or other parts of the new locomotives. A fully-equipped shop with the necessary machine tools for the repair of both steam and Diesel locomotives has been in service as an adjunct of the roundhouse for some time.

We'd like to make known through these pages, expedients for intensive use of existing facilities on your railroad—similar to this instance on the Susquehanna. Your ingenuity for efficiency may put helpful suggestions in the other fellow's mind—and thus aid the railroad industry to contribute its utmost to victory; and also be ready for peace-time competition.

The All-Purpose Diesel Wears the Maroon and Silver Gray Livery of the Coaches Which Are Its Part-Time Assignment

Streamline Outmoded Union Station at

AN EXTENSIVE remodeling and modernization project which involved both the exterior and interior of a large and important passenger station, as well as a rearrangement of the grounds surrounding it, and which completely changed the appearance of the building architecturally, has been completed by the Kansas City Southern at Shreveport, La. Yet despite the many and somewhat drastic changes that were made in the building and in the grounds, this work was done at moderate cost.

The building in question is the Union station, owned by a subsidiary of the Kansas City Southern. It faces north, fronting on Louisiana avenue, from which it sets back about 55 ft. and, together with the landscaped grounds, occupies the entire width of the block between Lake street on the west and Snow street on the east. At the time the modernization was undertaken, the station was used by the St. Louis Southwestern, the Illinois Central, the Southern Pacific, the Kansas City Southern, the Louisiana & Arkansas and the Texas & Pacific. More recently, the latter road has moved into its own station.

Architecture Out of Date

Built during the decade following 1890, the architecture and appointments of the old building belonged to the concluding days of the Nineteenth century. Constructed of red brick with a generous area of stone trim, the dominant feature of the design was a tall, square bell-tower, with a steeple roof and a balcony, placed at the northwest corner of the structure. Of nearly equal interest architecturally, however, a triple-arch portal in stone, flanked on either side by octagonal turrets with steeple roofs, and surmounted by a dormer window in the central portion of the roof, provided the main entrance to the station, which opened into the general waiting room.

Setting well above Louisiana avenue, the grounds in front of the building were terraced, and a long tiring flight of concrete steps led up from the street level to that of the building, reaching a wide concrete walkway that extended almost across the front and around the west end of the station. An additional entrance was provided at the west end of the train concourse, with a shorter flight of stairs leading down to Lake street. This latter entrance was used primarily by automobiles and taxicabs for picking up and discharging passengers.

On the east, a paved driveway, commonly known as Old Snow street, and separated from Snow street by a high chain-link fence, provided a parking area. To the rear of the concourse, between the station tracks and Old Snow street, there was a large frame eating house. The baggage building, a brick structure, was located immediately south of the concourse, between the station tracks and Lake street. Just south of this building there was a frame structure that had been used for many years as a United States mail building.

About 20 years ago, the station facilities became outgrown and additions were made at both the east and west ends of the original structure, the extension at the west end being 41 ft. 6 in., and that at the east end, 36

Below—The Shreveport Union Station Before Modernization, As Seen From the North Side of Louisiana Avenue, With Lake Street on the Right. Left—A View of the Station From the Same Point After Streamlining Was Completed. Note New Driveway and Main Entrance

Shreveport, La.

Effectiveness of facilities increased and appearance of structure improved by modernization of building and rearrangement of grounds

ft. 2 in., long. As a result of these extensions, the tower was no longer at the corner of the building, although the triple arch remained approximately at the center. The added space was utilized to increase all toilet facilities, to enlarge the negro waiting room and to provide a large retiring room for white women. At the same time the covered concourse was extended to the east to correspond with the eastward extension of the building.

After the completion of these additions and the incidental rearrangement of the station facilities, the floors of the negro waiting room, the telegraph office, the conductors lobby and all toilets were finished in concrete; the general waiting room had a marble floor on a concrete base; while the floors of the women's retiring room and the ticket office were laid with yellow pine. The wainscot in the toilets was of cement; the general waiting room had a terra cotta wainscot; that in the retiring room was of brick; and all other wall surfaces were plaster.

Four cast-iron columns in the general waiting room supported the members of the central portion of the roof, while a similar column had been intruded into the northwest corner of the waiting room to support the inner corner of the bell-tower. An open stairway leading to the basement was cut into the waiting-room floor at the left of the main entrance. The women's retiring room extended the full width of the station, with a floor area 20 ft. by 30 ft. The enclosed ticket office, with the usual wicket openings, also extended the full width of the building, separating the white and colored waiting rooms.

To the west of the main part of the general waiting room, the company telegraph office and conductor's lobby occupied about one-third of the width of the building. The Western Union telegraph office occupied the octagonal recess formed by the turret on the right of the main entrance; but the corresponding recess on the left was not occupied, being partly cut off by the basement stairway and its railing.

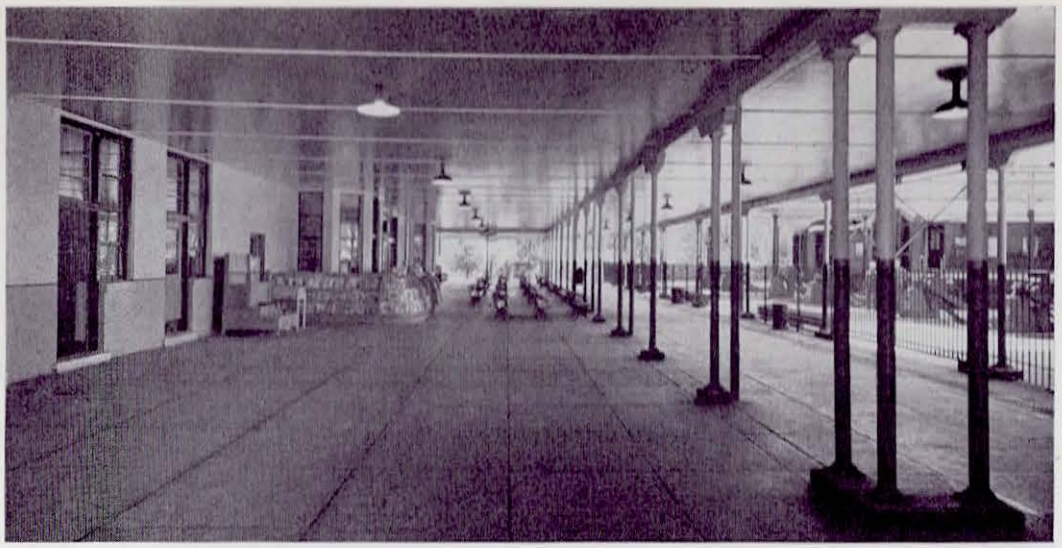
Lighting Was Poor

In general, while the building was in no wise gloomy, the natural lighting was not as good as it should have been. The three windows in each of the turrets were narrow, while the stone columns and the solid-panel wood doors at the main entrance shut out much light. On the train-shed side, the covered concourse, 26 ft. wide, running the length of the building, combined with the trainshed canopies, all painted in dark tones, also reduced the natural lighting. In addition to this, a considerable volume of the light that did reach the interior was absorbed by the non-reflecting surfaces of the neutral walls and dark furnishings. In carrying out the modernization, a conscious and highly successful effort was made to correct this defect.

Obviously, the bare iron columns, the dark furniture, the monotony and the non-reflecting surfaces of the neutral walls and furnishings, together with the numerous recesses, presented an extremely difficult problem in artificial lighting that could not be solved satisfactorily with the equipment then available. Although an ample number of fixtures had been provided to give the total amount of illumination needed, the light was not well diffused, but was characterized by brightly-lighted areas and deep shadows.

In general, the modernization work fell into three categories, namely, the remodeling of the exterior, the rearrangement and refinishing of the interior and the improvements to the grounds. On the exterior, the appearance of the bell-tower was greatly altered by dismantling the steeple roof and balcony and by closing the long narrow window openings in the sides. Likewise, the steeple roofs of the turrets and the dormer window surmounting the portal were removed and the narrow window openings in the turrets were filled. The stone arches forming the portal and the three concrete entrance steps leading to the vestibule, which were outside the building line, were taken out and the entire space between the remodeled turrets was utilized to provide a more adequate and more easily negotiated entrance. As a means to this end, the top of the terrace was raised an amount equal to the total height of the steps that were removed. The new entrance is surmounted by an aluminum marquise with reeded edges and recessed ceiling lights.

To permit the removal of the basement stairs from the



A New Plywood Ceiling, Improved Lighting and the Removal of the Old News Stand Altered the Appearance of the Concourse

waiting room, the old areaway and iron fence adjacent to the easterly turret were removed and a new exterior entrance, with concrete stairs was constructed, with the axis parallel to the building, to give access to the lower level. Another item which tended to alter the appearance of the building was the enlargement of all window openings and the introduction of brick piers between multiple windows. To add to the changed appearance, awning-type steel sash was substituted throughout for the old double-hung wood sash. The arched doorway to the colored waiting room was also changed to provide a straight lintel in line with the tops of all of the windows, and thus provide for horizontal lines throughout.

Appearance of Building Altered

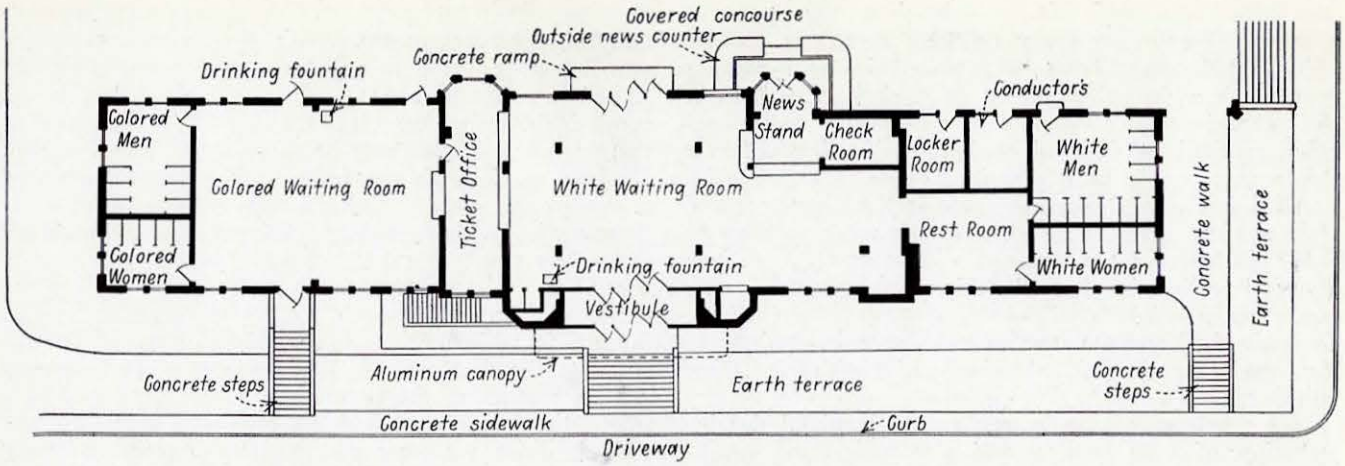
When these alterations had been completed, the exterior surface of the building was sandblasted to remove dirt and loose particles of brick, stone and mortar, as well as to provide a uniform surface for the next step, in which the entire exterior was then given a coating of shotcrete. These alterations and the new surface, which eliminated the contrasting colors of the stone and brick, changed the appearance of the structure so completely that it now bears no resemblance to its original appearance, except for the silhouette lines of the roof, and even part of this is lost by the fact that the dormer window and the turret roofs are no longer in evidence. A neon sign in red, backed by light cream-colored porcelain-coated metal reflectors, bearing the words Union Station, has been placed on the altered tower.

Interior Is Modernized

Changes as extensive and fully as drastic as those on the outside were made to the interior of the station, although they included only one or two minor rearrangements of the floor plan, involving principally the news stand and the women's rest room. Except for this rearrangement and the alterations to the entrances and windows, both of which affected the interior in about the same measure as they did the exterior, the extensive changes that were made consisted largely of a substitution of modern materials for those that were used originally. In some cases, however, considerable improvement was noticeable through the replacement in kind of materials, such as plaster, that had completed their service life.

In connection with the alterations to the main entrance, the three narrow solid-panel wooden doors which excluded all light were taken out and two wide, hollow-metal doors with large, wired, polished plate-glass panels, to admit the maximum daylight, have replaced them. Above these doors, large transoms, also with polished,

The Colored Waiting Room Was Given the Same Treatment and Has the Same Appointments As the Main Waiting Room



General Floor Plan of the Union Station at Shreveport, La., as Modernized

wired, plate-glass panes, admit more light, and panels of glass blocks on either side of the door openings add their quota of daylight. On the concourse side, the entrance to the waiting room was treated similarly, except for the panels of glass blocks, while on this side large plate-glass windows give a full view of the concourse and admit more light than the older and narrower windows.

In the rearrangement, the news stand, which formerly occupied a considerable area near the west end of the concourse, was transferred to the telegraph office and the conductor's lobby, the latter being utilized as a check room. New counters, cases and fixtures were provided in keeping with the appointments in the waiting room. A large counter, encircling the bay window of the former telegraph office was also constructed to give access to the news stand from the concourse. The women's retiring room was reduced to approximately 18 ft. by 20 ft., and the space thus made available was utilized to provide a trainmen's locker room and a conductor's office, with entrances from the concourse.

Walls and Floors Were Replaced

In the general waiting room the marble floor was replaced with rubber tile. The terra cotta wainscot was also removed and a pleasing contrast was produced by installing an oriental-yellow glazed-tile wainscot with a black base. In the general waiting room, the ticket office, the colored waiting room and the news stand, suspended plaster ceilings were installed to reduce the height of the rooms. Indirect lighting was installed in all of these rooms by means of recessed, flush-mounted fixtures. In the ticket office this lighting is augmented by the addition of fluorescent lights.

To transform the appearance of the general waiting room still further, the four unsightly cast iron columns in the main section of the room were encased in rose-colored St. Genevieve marble, and that under the tower was faced with plaster. For the convenience and guidance of the traveling pubfic, translucent illuminated signs were provided over the doors of the waiting rooms and the rest room, in the concourse and elsewhere where directions are needed.

Enough of the wall area enclosing the ticket office was torn out to permit the installation of open counters facing both the white and the colored waiting rooms and, as the office space was thus opened to full public view, the old and outmoded furniture was discarded in favor of new metal ticket cases, desks and other furniture. In this room also, rubber floor tile was laid to correspond with that in the general waiting room.

In the modernization, the colored waiting room and toilets were given the same treatment as those for white passengers, except that the floors of the toilets for the latter were laid with patterned ceramic tile, while the colored toilets have concrete floors. Cermic tile was

General View of the Main Waiting Room, Showing the Open Ticket Office in the Background and the Main Entrance at the Left

also laid in the floor of the vestibule to the main entrance. Likewise, sanitary drinking fountains serving refrigerated water have been placed in both waiting rooms. A wide, hollow metal door, similar to those in the general waiting room, with polished, wired, plate-glass, marked by diffused opal-glass side lights, forms the entrance to the colored waiting room.

All defective and worn concrete in the concourse and train platforms was renewed, and the wooden sections of these platforms were replaced with concrete. A new plywood ceiling in paneled design was applied in the concourse, and improved lighting was provided for both the train shed and the concourse. The train sheds were also repaired and repainted to harmonize with the station building.

Not the least of the improvements involved the installation of new heating and air-conditioning equipment. The boiler is gas-fired and is entirely automatic in operation, being controlled by a pressure-regulating device which maintains a boiler pressure of 28 lb. Protective equipment, also automatic in operation, shuts off the gas supply if the pilot lights become extinguished, if the gas supply fails or in the event that the automatic water injector on the boiler becomes inoperative. Warm air, heated by passing over steam coils in the air conditioning unit, is circulated through ducts to all parts of the building, the temperature being controlled by thermostats in the several rooms. The air-conditioning equipment, similar in its operation to the heating unit, is also fully automatic. Supplementing each other, an even temperature is thus maintained automatically in the station throughout the year.

New Landscaping Improves Grounds

Changes fully as drastic as those to the building were made in the grounds surrounding the station, some of which helped to emphasize the altered appearance of the structure. One of the most important of the latter involved the Louisiana Avenue frontage. Here the high terrace was cut down and set back to accommodate a double-lane, one-way driveway and sidewalk from Lake street to Snow street. The long flight of stairs was eliminated and was replaced by two shorter and less tiring flights, one between Louisiana avenue and the driveway and the other leading from the driveway to the main entrance to the station.

A feature of the landscaping that greatly affected the appearance of the building was the removal of the concrete walkway across the front of the station and the raising of the upper terrace to the level of the main entrance. While this raise amounted to only about 2 ft., in effect it lowered the bottoms of the windows by this amount and thus decreased the apparent height of the building, an illusion that was already emphasized by the simple horizontal lines across the tops and bottoms of the windows and along the parapet, and by the elimination of the steeple roofs and the dormer window.

With the removal of the concrete walkway, it became necessary to provide other means of access to the colored waiting room. This was done by constructing a concrete stair leading directly from the entrance of this waiting room to the new driveway. Likewise, the extension of the concrete walkway around the west end of the station was removed and this part of the terrace was also graded to the new level. A new walk and a concrete stair, facing the driveway, were constructed to serve as an entrance to the concourse. All of the stairways were protected by bronze handrails.

While the grounds on the Lake Street and Louisiana Avenue sides of the station had been well maintained, the area east of the station did not present a correspondingly pleasing appearance. With the construction of the new driveway, the parking area in Old Snow street assumed new importance, and it became desirable to improve both the parking facilities and the appearance of the grounds. Little could be done in the latter respect, however, so long as the frame eating house continued to occupy the space at the east end of the concourse.

Accordingly, this building was torn down, Old Snow street was repaved and the area adjacent to the station was filled and terraced. To give convenient access to the station from the south end of the parking area, a ramp, 5 ft. wide, on an easy grade leads from Old Snow street to the east end of the concourse. As a further step in improving the appearance of the terminal as a whole, the frame mail building was torn down and the mail facilities were moved into the baggage building. The latter was also altered extensively, including windows, doors and light fixtures, to conform to the remodeled station.

The plans were prepared and the work was carried out under the direction of A. N. Reece, then chief engineer and now assistant to the president.

Communications . . .

Time to Make Friends

CHICAGO

TO THE EDITOR:

I hasten to be among the many who subscribe heartily to your fine editorial in the issue of June 27, entitled "Don't Neglect the Passenger." I hope this is the beginning of an editorial effort that will have representation of this character in many succeeding issues of *Railway Age*.

Traveling a great deal myself by rail, I know full well that the picture painted in this editorial is not a bit overdrawn. It seems to be an unfortunate phase of human nature that when there is too much business, those engaged to serve, for some unaccountable reason, develop an attitude of affront.

You say very truthfully that "discourteous employees are in the minority" but undoubtedly public attitude is judged by the contact of a relatively small proportion of the sum total. The railroads certainly have a splendid opportunity to make thousands of new friends among the new patrons, many of whom have never been on the rails before, through courteous treatment and a spirit of friendliness. Many of these undoubtedly can be retained as passengers when the emergency is over.

JOSEPH L. FINN,
Reincke-Ellis-Younggreen & Finn.

Locomotives in Blackouts

WASHINGTON, D. C.

TO THE EDITOR:

I am very much interested in the article beginning on page 1144 in the June 13 issue of the *Railway Age*, entitled Blackouts—But No Blot Outs of Operations on the Southern Pacific. Judging from the article the railroads on the Pacific Coast have made much progress in figuring out sufficient blackout arrangements on locomotives, especially headlights. The railroads on the Atlantic Coast, as far as I have been able to ascertain, have given this matter very little consideration, and I presume that that has resulted in the instructions issued by the New York State Director of Civilian Protection, Major General William N. Haskell, reference to which is made on page 1155 of the same issue of the *Railway Age*, in the paragraph pertaining to locomotives, reading as follows:

"Locomotive headlights, front and rear, shall be put on dimmer control and back-up light extinguished, white lanterns to be sub-

stituted therefor. On yard engines not equipped with dimmers, headlights, front and rear, to be extinguished and white lanterns substituted therefor. Cab lights not essential to safe operation shall be extinguished. Storm curtains shall be drawn. Firebox doors shall be kept closed except when actually putting in a fire."

The personnel of the Bureau of Locomotive Inspection is vitally interested in civilian protection during blackout periods. However, it so happens that certain rules pertaining to headlights and other lights on locomotives were approved under the Locomotive Inspection Law. They have been in effect for a number of years and are for the promotion of safety of railroad employees and travelers, and include rules pertaining to lighting equipment for water gages, etc., in the cab.

I note that General Haskell's order provides that locomotive headlights shall be put on dimmer control and back-up light extinguished, white lanterns to be substituted therefor. Inasmuch as road locomotives where headlights are used with the greatest light intensity are required to be equipped with dimming devices, there would be no difficulty in complying with the first provision —dimming headlights. However, as road locomotives are equipped with a small back-up light (yard engines being required to have headlights front and rear) it would be manifestly unsafe for the engineer and fireman making a back-up movement with road locomotives in yards and over highway crossings with nothing to indicate its approach. It would be particularly dangerous for track walkers, switchmen, etc., who might be in the path of such locomotive while backing up. Incidentally, the death of an experienced railroad man is just as serious and as fatal as death occurring on the battlefield.

It seems to me that action taken by the Pacific Coast railroads, as explained in the article previously referred to, such as applying hood shields, should be given consideration by the railroads not only in the State of New York, but by all railroads traversing the states bordering on the Atlantic Ocean.

JOHN M. HALL,
Director, Bureau of Locomotive Inspection, I. C. C.

Where the Limitation On Coal Production Lies

WASHINGTON, D. C.

TO THE EDITOR:

In your editorial in July 4's *Railway Age* captioned "More Equipment—or Else," there is contained the following statement: "The railroads have been moving all the coal the country's mines can produce."

We have in the recent past made a survey of the potential capacity of the country's mines, and the result of that survey shows that the mines can produce at least twelve million tons of coal weekly under the existing labor set-up. Production thus far this year has averaged about eleven million tons weekly, which leaves an average of at least one million tons per week that the mines could have produced. The railroads have unquestionably done a remarkable job in transporting freight, and their efficiency has agreeably surprised many of us. It would be accurate to state that they have moved all the coal the country would take, without any car shortage, but it is not a true and correct statement of fact to say that they have been moving all the coal the country's mines can produce.

Knowing the editorial policy of your magazine to adhere to the facts, I call this to your attention as I am sure you had no intention to convey the wrong impression about the productive capacity of the nation's coal mines.

J. D. BATTLE,
Executive Secretary, National Coal Association.

[The thought we wished to impart in our editorial was that railroad service was not a limiting factor in the production or distribution of coal. If it be true—as unquestionably it must be, on authority of Colonel Battle—that the nation's coal mines can produce 1,000,000 more tons per week than they are now producing, then it is also true, as matters now stand, that the railroads could transport that additional tonnage without congestion, provided it were produced steadily, and movement were not impeded by strikes or stoppages. The railroads have not limited and are not limiting this nation's supply of solid fuel—and they are not likely to do so, except as government allocation of scarce materials denies them additions to motive power and rolling stock (especially motive power) commensurate to further prospective increases in the country's production.—EDITOR.]

New Books

The Story of Railroad Passenger Fares, by Clyde H. Freed. 299 pages. 9¼ in. by 6¼ in. Bound in cloth. Published by the author, 621 Lexington Place, N. E., Washington, D. C. Price $2.50.

This selective survey of the historical background of the railway passenger fare structure in the United States is evidently based on extended research and painstaking study of old documents and of commission proceedings, court records, and legislative actions. The somewhat loosely organized material is divided into three classifications—the first dealing with the general trends of passenger fares since 1830, the second with the gradual development of federal regulation and the special provisions of the Interstate Commerce Act, and the third with state regulation, separately treated for each state.

The author is chief clerk of the ticket office of the Washington, D. C., Union Station. In general, he has recounted with commendable brevity many more or less related incidents of the stormy course by which passenger tariffs have arrived at their present condition of relative stability. The book is full of odd and provocative bits of half-forgotten history. The first revenue passengers were hauled on January 7, 1830, it appears. The railroad was the B. & O., the motive power was one white horse, and the fare was three cents per mile. "Smokers" on the Old Colony a century ago were the coaches nearest the locomotive, where the cinders were most abundant and the fares consequently somewhat lower. The first extra fare train ran from New York to Washington on the Pennsylvania on April 19, 1874. A year earlier the annual report of the Burlington had assured its stockholders that "the state cannot abridge or take away the right of the railroad to operate its road and to fix, adjust, and collect reasonable tolls." In 1880 the Lake Erie & Western, to meet a need for ready cash, sold $275,000 worth of passenger tickets to a banking syndicate for $104,000. The first openly operated passenger fare pool was set up in 1870 between Chicago and Omaha by the Rock Island, Burlington, and North Western, and it continued to function until after the Milwaukee in 1882 entered into the competition between these points.

In just such citations of hundreds of specific facts and consequences the author has developed the historical background of most of the general principles and special provisions behind the current passenger fare structure. As this information is not readily available elsewhere, particularly in such detail, the book will be very useful for reference.

Let's Write Good Letters, by Sherman Perry. 176 pages. 8¾ in. by 5⅝ in. Bound in cloth. Published by the American Rolling Mill Co., Middletown, Ohio. Price $1.00.

This short text book on business letter writing is a successor to "Making Letters Talk Business," first published in 1924 by this organization. The original book went through six editions, and about one hundred thousand copies were distributed. It was used extensively in industry and business as a practical guide to the principles of composition and mechanics of writing, and the present volume is intended to be equally useful under today's conditions.

The first part of the book suggests, and illustrates with good and bad examples, ways to make the content of business letters clear and effective, yet concise and tactful. Particularly pointed is the list of "goose quillers," trite terms left over from olden times that modern usage frowns on, such as "esteemed favor," "and oblige," "advise," "beg," "by return mail," and "duly noted." Separate short sections deal with words, phrases, sentences, paragraphs, and organization of thought.

Nearly half the book is devoted to practical rules and useful suggestions for the secretary and typist, including a concise summary of good business usage and a review of "essential English." Following this, a chapter titled "Essentials of Report Writing" completes a compact and helpful treatment of a subject important to anyone whose business activities include correspondence.

Railroads-in-War News

Eastman Discusses Travel Control

ODT Director tells Senate groups that all seats may have to be reserved

Joseph B. Eastman, Director of Defense Transportation, recently told a Senate appropriations subcommittee that passenger travel on the average is 50 per cent over what it was last year and that "the prospects on rail travel are none too good." This situation was disclosed when the appropriations committee made public hearings on the first supplemental national defense appropriation bill for 1943. The bill, H.R. 7319, as passed by the House, carries an appropriation for the Office of Defense Transportation for the current fiscal year of $7,216,515, and the measure, as reported to the Senate, carried the same amount of money.

Senator Brooks, Republican of Illinois, wanted to know whether or not there was a good deal of anxiety about the priorities on travel and whether such a thing was in prospect for civilian travel.

"We can't be sure of that," replied Mr. Eastman. "All we have done so far is to warn the public and ask them voluntarily to cut down their travel in the various respects. Passenger travel on the average is 50 per cent over what it was last year. That varies in different parts of the country."

"That travel is largely by government employees, isn't it?" asked Senator McKellar, Democrat of Tennessee.

"And troops on furlough, and so on," continued the ODT Director. "On the Southern, for example, they are running more than 100 per cent over last year. In addition to that, as travel by automobile is cut down between the communities, as it is in the east and will be throughout the east, that will increase the rail travel. There have been very heavy troop movements, and the prospects are that they will continually increase as the Army grows and the activities of the Army become greater. So that the prospects on rail travel are none too good. They haven't had any increase in passenger cars, none whatever."

A picture of how passenger travel priorities may work was given later in the testimony by Mr. Eastman after Senator O'Mahoney, Democrat of Wyoming, had asked whether the ODT anticipated that vacation travel would be cut off altogether.

"I don't think so," declared Mr. Eastman. "If it comes to actual control over passenger travel, it is a little difficult to know just what we can do. I have no power to say county fairs shall not be held or that race tracks shall not be run. I have control over transportation. Probably the first thing to do would be what has been done in the case of air traffic, and say certain people have priorities and they shall have the first opportunity. Then you can carry that down the line pretty far. How far you can carry it is a question on which members of my staff are now differing. If you get down to the rationing of our transportation, it would probably mean putting it all on a reserved-seat basis and creating a great organization to handle it."

Sherrington Enjoys Himself in "American Invasion"

C. E. R. Sherrington, energetic and accommodating secretary of the (British) Railway Research Service, who is widely acquainted in this country, writes from London under date of June 13 that his office has become "virtually an American base, and I cannot tell you how glad we are to have it so.

"I can foresee," he says further, "that they will all be dropping in here to look over 'Railway Age,' 'Railway Engineering & Maintenance,' etc., to keep posted on home news."

ODT Advisory Committees

Director Eastman of the Office of Defense Transportation has appointed advisory committees from the vegetable oil and packing house products and the chemicals industries. The committees will assist A. V. Bourque, chief of ODT's Section of Tank Car Service, in working out methods of increasing the efficiency of tank car movements.

Schools Urged to Open and Close in Mid-Week

Preparatory schools and colleges have been requested by the Office of Defense Transportation to schedule their opening and closing dates so that travel to and from the schools will occur in midweek. The request was presented to the American Council on Education.

The Council's committee on military affairs immediately referred the ODT request to the country's educational institutions and recommended that preparatory schools and colleges using the same transportation systems call regional conferences to put ODT's requests into effect. Another suggestion made by ODT and approved by the Educational Council was that in regions where there are a number of colleges, opening and closing dates should be spread over a period of at least two weeks.

A. A. R. Conducts Conservation Drive

P. & S. Mechanical and Engineering divisions promoting intensive campaign

"An intensive campaign to conserve material and reclaim every bit that can be salvaged so that our armed forces may be supplied with arms and equipment is being conducted by the railroads of this country," said a July 15 statement from the Association of American Railroads. The Purchases and Stores Division in cooperation with the Mechanical and Engineering Divisions have just revised and sent to member roads instructions as to the reclamation of materials by recovery and repair covering a much wider scope than ever before.

As part of a campaign the three divisions have issued a list of more than 700 definite recommendations for recovery and repair of materials. Based upon a "thorough study of the practices in use on various railroads, revised according to actual results obtained," these recommendations cover practically every article used by the railroads, ranging from discarded linen from dining cars and hair taken from seat cushions to steel rails and locomotive axles. Special attention is paid in the new instructions to substitutes for rubber, and the marketing of rubber scrap. Equal stress is placed upon scrap metal which, the railroad salvage campaign declares, is today "precious metal."

Among the examples of the 700 definite recommendations which form the basis of the campaign are the issuance of paint brushes only to regularly assigned painters, with instructions as to the best method for conserving their life and instructions for the care and preservation of cab curtains and other parts made of canvas duck now in great demand by the government for war needs.

"Scrap boxes and docks," it was pointed out, "should be carefully watched and no steel sheets, bars, shapes or material of any kind scrapped that can be reclaimed and made suitable for further use. Under present conditions steel castings, bolsters, and couplers should be welded wherever permissible so that the materials can be kept in service.

"All second-hand lumber should be carefully inspected and as much as possible reclaimed and used again. Rails, frogs and switches should be welded, and angle bars reformed so that our railroad maintenance can be kept up with the minimum demands for new materials. Careful consideration should be given to the economy of repairing track tools, such as welding ends on

(*Continued on page 111*)

Claiborne Railway Drives Gold Spike

General Carl R. Gray dedicates the 50-mile line built by army railroaders

On July 11, at LaCamp, La., while several thousand railway and general service engineer troops stood at attention, Brig. Gen. Carl R. Gray, Jr., general manager, Military Railway Service, drove a golden spike in the track of the 50-mile Claiborne & Polk Military Railway, joining Camp Claiborne and Camp Polk, thus marking the completion of the first strictly military railway ever built in the United States. Following the driving of the spike, which was only one part of an impressive ceremony accompanied by martial music, locomotives from Camps Claiborne and Polk moved to a coupling over the last rail, where the company commanders of the respective camps, standing on the locomotive pilot steps, saluted and joined hands.

Other features of the celebration, which was attended by high ranking military and railway officers from many parts of the country, were brief addresses by Brig. Gen. Gray; by W. N. Deramus, president of the Kansas City Southern, a connecting line at Camp Polk; by R. C. White, chief operating officer of the Missouri Pacific, a connecting line at Camp Claiborne; by Lt. Gen. Walter E. Krueger, commanding general Third Army; and by Brig. Gen. John W. Schulz, commanding officer, Engineer Organization Center, Camp Claiborne. Col. H. McE. Pendleton, commanding officer of Camp Claiborne, was master of ceremonies.

In turn, each speaker congratulated the various army engineer units which had participated in the construction of the line, President Deramus of the K. C. S. stating that "even as these rails have been joined here today, so the railways and the armed forces of the nation have been joined with the common and indomitable purpose of defeating the powers that seek to crush our liberty and freedom." Mr. White, proposing a toast to the men in the ranks who had built the new line, pledged that the railways, "the basis of all transportation in the country," will not fail the armed forces.

The new Claiborne & Polk Railway, the construction of which was started in September, 1941, was built by the 711th Engineer Battalion, Railway Operating, located at Camp Claiborne. This battalion was activated in June, 1941, and was the first such battalion ever to be so organized and called into service in the country in peace time. Among its officers are men from more than 12 of the Class I railroads of the country, these officers including Major G. M. Welch, commanding officer-superintendent (formerly assistant division superintendent, C. St. P. M. & O., St. James, Minn.); Capt. H. A. Israel, executive officer-assistant superintendent (formerly assistant superintendent, M. P., Bush, Ill.); and Capt. E. J. Lawler, storekeeper (formerly storekeeper, C. R. I. & P., Horton, Kan.)

The new military road, a single-track line, built as a proving and training ground for military railway engineer operating units, extends in a general east and west direction between the two camps served and utilizes for approximately 23 miles the roadbed of the old Hillyer-Deutches-Edwards, an abandoned logging road. The remainder of the 50-mile line was constructed in little-known virgin country in the face of many difficulties, including general soil conditions, adverse weather and delays in the receipt of both construction equipment and materials. In addition to its function as a training ground, the new line, with equipment which includes 10 oil-burning locomotives and more than 100 cars of various types, will function as a service and supply road for the two camps. It will be operated on a divisional organization basis, with an officer personnel throughout (operating, stores, mechanical, engineering and maintenance of way), comparable to that on many Class I railroads.

ODT Bans Auto Racing

Director Eastman of the Office of Defense Transportation has issued General Order No. 14 prohibiting automobile racing in the United States. The order, first issued July 3 with a July 10 effective date, was followed by a July 8 amendment postponing the effective date until July 31. The prohibition will cover all motor-vehicle racing meets, including those of so-called "midget" cars and motor cycles.

Transportation on List of Essential Activities

Transportation services and production of transportation equipment were included on the list of 34 "broad essential activities" compiled by the War Manpower Commission and distributed this week by National Selective Service Headquarters to its agencies. "The list," said Selective Service's announcement, "was prepared to guide local boards when considering individual registrants for occupational classifications but in no way alters the statutory ban on group deferrments."

Multiple Loading of Carload Shipments in Single Cars

The Interstate Commerce Commission's Division 2 was scheduled to hold a conference in Washington, D. C., on July 17, to discuss with carrier and shipper representatives a suggestion that a national tariff should be filed covering the handling of two or more carload shipments in a single car. The conference was called "to develop the situation and determine what, if anything, the commission should do in the premises," and the notice said that various parties have called attention to the fact that no general tariff or tariffs governing the multiple loading have been filed.

"The subject," the notice continued, "has been a matter of correspondence with officials of the Association of American Railroads, but the commission has not been definitely advised of the arrangements that have been made for double and triple loading of equipment, and uncertainty exists as to the extent that such arrangements are available, the method of handling such cars, and the charges therefor."

Trucking Order Revised by ODT

Changes include cancellation of rule requiring 75 per cent return load

Provisions of General Orders ODT Nos. 3, 4, and 5, requiring over-the-road trucks to be loaded to 75 per cent of capacity on return trips, have been canceled by the Office of Defense Transportation which on July 14 also issued a revision of Order No. 3, governing over-the-road operations of common-carrier truckers. Revisions of the other two orders which govern operations of contract carriers and private trucks will be issued shortly, the announcement said.

Aside from the change in the return-load requirements, the revision of Order No. 3, which becomes effective August 1, limits common-carrier trucks to speeds of 40 m.p.h., as a means of saving tires and prolonging the life of engines and parts.

Generally the revised order, as ODT put it, establishes "a more flexible standard for conservation" of equipment. Under it, all trucks affected will be required to carry a capacity load over a "considerable portion" of an outgoing or return trip. Trucks may be operated with less than capacity or empty over a portion of such trips only if, after exercising "due diligence" as defined in the order, the trucker is unable to comply with requirements.

The exercise of "due diligence" will include checking with joint information offices being established pursuant to General Order ODT No. 13; or checking with other carriers individually, in the event there is no information-office service available, in an effort to obtain a load. In the event no load is thus obtained for a truck for a contemplated trip, the trucker must make an effort to lease the truck to another carrier "capable of using it in a manner that would be in accordance with the objectives of the order."

Only when all such efforts to obtain a load and to lease the truck have failed, may a truck be operated empty or partially loaded over a part of the outgoing or incoming trip. In attempting to obtain a load, however, the trucker is not required to take any action that would not be "consistent with prior commitments involving the use of the truck en route."

As in the original order, the capacity of a truck is to be determined by the load-carrying ability of the tires, less the weight of the truck. The rated load-carrying ability of all types of truck tires is set forth in an appendix to the order. No truck will be required to be loaded in excess of state maximum limitations or bridge-load limitations established by state or local regulations. In that connection Chairman Eastman of ODT had written to the state governors a letter saying that the truck orders would be thus adjusted. The adjustment was made because the states have "complied in good faith" with requests of federal war agencies for modifications of size and weight restrictions. The ODT director

went on, however, to tell the governors that ODT was planning a survey to determine the extent to which state weight limitations may still be "hampering efficient use of motor transport equipment."

The order's loading requirements do not apply to trucks transporting high explosives, trucks operated under the direction of armed forces of the federal or state governments, trucks engaged exclusively in the transportation of repair or service men and their equipment and supplies, trucks operated exclusively in the maintenance of public utilities, trucks operated in emergencies exclusively for the protection or preservation of life, health or public safety, and trucks engaged in sanitation services. Exempt from both the loading requirements and the limitations on gross weight are special equipment; while tank trucks and farm trucks are exempt from the entire order. Also, as ODT announced in another July 14 statement, tank trucks will continue to be exempt from provisions of General Order ODT-No. 6, governing operations of trucks used in local delivery service, until August 1. The exemption is contained in General Permit ODT No. 6-6.

WPB Requisitions Rail From C. & N. W.

The War Production Board has requisitioned rail and other metal from the Chicago & North Western's 102-mile line between Hastings, Nebr., and Linwood. The rail will be relayed in tracks at war industries, shipyards, and army installations.

The C. & N. W. application to abandon the line was approved by the Interstate Commerce Commission last year, but the effective date of the commission's order had been postponed from time to time while the Nebraska State Railway Commission carried on a court fight against the abandonment.

Would Permit Extra Delivery Service Before Holidays

A general permit authorizing additional local delivery service by motor carriers before national holidays falling on Saturdays and Mondays has been issued by the Office of Defense Transportation.

The action allows carriers whose operations are restricted by General Order ODT No. 6 to make two deliveries or one delivery and one call back on the Friday before a national holiday falling on Saturday or on the Saturday before a national holiday falling on Monday. In the event an extra delivery or a call back is so made, the carrier may make no delivery on the holiday, other than certain special deliveries authorized by Order 6.

ODT Appointments

A. R. Mahaney, chief of the Traffic Flow Unit in the Office of Defense Transportation's Division of Traffic Movement, has been appointed assistant director of the Division, in charge of the Section of Traffic Channels. He succeeds the late A. G. Warren. Fred L. Yeater, former assistant to the general superintendent of transportation for the Missouri Pacific, succeeds Mr. Mahaney as traffic flow chief.

Mr. Mahaney came to ODT in April from the Pennsylvania where he had been assistant superintendent of freight transportation for the Central Region. Another recent ODT appointment was that of Walter P. Hedden, chief of the Bureau of Commerce, Port of New York Authority, to be consultant to Fayette B. Dow, director of the Division of Pipe Lines, Tankers, Tank Cars, and Tank Trucks.

Would Grant Power to Take Over Private Automobiles

Senator Reynolds, Democrat of North Carolina and chairman of the Senate military affairs committee, has introduced S. 2651, a bill authorizing the President to acquire vehicles and other transportation equipment and supplies necessary for the successful prosecution of the war. The bill would give the President broad powers to acquire by gift, purchase, or requisition any type of vehicle or transportation supplies, including private automobiles, that he found necessary to carry on the war.

The bill provides for an authorization of $5,000,000,000, and would continue in effect until December 31, 1944, unless repealed by the Congress or the President.

Eastman Asks Train Travelers to Limit Baggage

Because the baggage problem on railroad passenger trains has become a serious one, Director Eastman of the Office of Defense Transportation has appealed to travelers to limit themselves to one bag wherever possible.

"A number of the larger railroads," said his statement of July 15, "have reported that the amount of luggage being taken into cars by passengers is becoming increasingly difficult to handle because of the crowded condition of coaches and Pullman cars, especially during periods of peak travel. Some of the railroads have attempted to induce passengers to check their extra luggage so that it could be handled in the car provided for that purpose, but the effort has not been successful.

"By confining themselves to one bag wherever possible, travelers can aid greatly in providing more room for others. If it is necessary to carry more luggage, checking facilities are provided wherever tickets are sold. It is well to remember that the extra baggage carried into a car may well exclude some soldier from a seat."

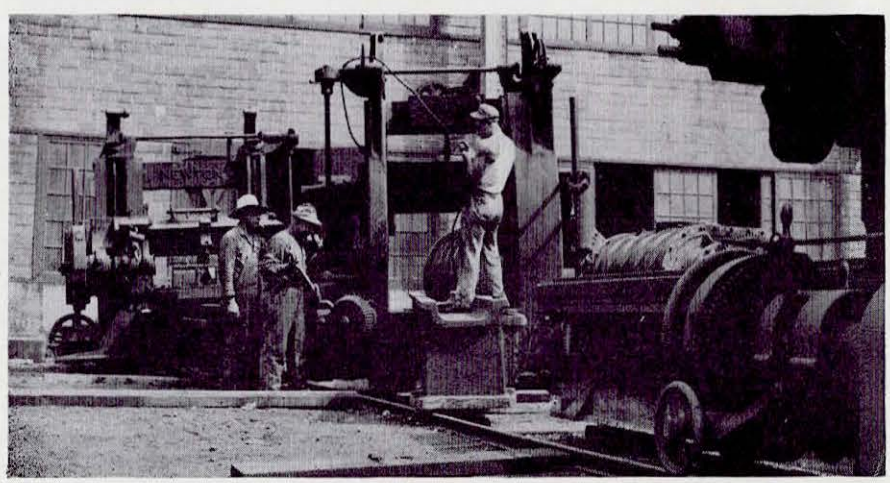
Alcohol Transportation Program Functions Smoothly, Says ODT

"The transportation system set up in recent months to feed industrial alcohol in unprecedented quantities to newly-built smokeless powder and synthetic rubber plants is functioning smoothly and efficiently," according to the Office of Defense Transportation.

During the first six months of this year, a total of 139,000,000 gal. of industrial alcohol was produced and moved to such plants, and production for the remainder of the year is expected to amount to about 212,000,000 gal. In recent months, black strap molasses has been moved from Gulf ports to industrial alcohol plants on the Eastern seaboard at the rate of between 1,200 and 1,500 cars a month. Western grain is moving into distilleries at the rate of more than 2,000 cars a month and the rate is expected to rise to 5,000 cars a month before the end of the year. The production schedule calls for an output of 530,000,000 gal. of industrial alcohol in 1943, by which time a large part of the whiskey distilling industry will have been converted.

"In carrying out the program," ODT said, "it was necessary to establish traffic schedules, dovetailing shipments of raw materials into production schedules at distilleries and alcohol plants, to establish freight rates, to arrange for necessary storage space, and to make provision for rail and truck equipment. To aid the War Traffic Section of ODT's Division of Traffic Movement in dealing with these problems, Joseph B. Eastman, ODT director, last April appointed a Traffic Advisory Committee on Industrial Alcohol, Distilled Spirits, and Molasses. Ralph R. Luddecke, general traffic manager of the Fleischmann Distilling Corporation, New

* * *



Old Baldwin Tools from the Last War Will Help to Win This One

Baldwin Locomotive Works Is Junking Its Obsolete and Worn-Out Machinery in a Scrap Drive Which Will Salvage 1,800 Tons of Metal—Sufficient to Produce 60 of the M-3 Tanks Which the Company Is Now Building

York, was named chairman of the committee.

"Cooperating with ODT officials, the Chemicals Branch of the War Production Board, and other government agencies, the advisory committee has taken an active part in working out arrangements for the speedy and efficient movement of industrial alcohol traffic. WPB requests for thousands of tank cars for transportation of molasses in recent weeks have been met as a result of the committee's efforts without taking any cars for this service out of the transportation of petroleum. This was done by temporarily taking the cars out of other services where they were not so urgently needed."

Religion Lauds Railroads

The religious leaders of the country are aware of the contribution to national wartime morale which the railroads have made through their reliable service. They believe that "the religious forces of America and the railroads have much in common. Neither group can successfully reach its goals without the help of the other."

Accordingly, the Interdenominational Transportation Committee has memoralized the railroads in appreciation of the contribution the railroads have made toward building the country's spiritual forces into a "tower of strength," and they have pledged themselves to use free passes for railroad travel only for "trips which are absolutely necessary for the undergirding of essential church activities throughout America."

The memorial was signed by representatives of the Roman Catholic, Baptist, Methodist, Episcopal, Congregational, Christian (Disciples), Lutheran and Presbyterian churches.

East Coast Oil Movement Slows A Little

Rail movement of oil to the east coast during the week ended July 4 was at the rate of 720,510 barrels daily, according to an announcement by Petroleum Coordinator Harold L. Ickes. This represents a decrease of 210 barrels daily, or .029 per cent, from the volume moved during the week ended June 27, when car loadings averaged 720,720 barrels per day.

In handling this movement the 33 oil companies loaded 24,017 cars. Including the cars that were on the way back west for reloading, it is estimated that the east coast service employed 56,000 cars, taken largely from other sections of the country.

At the same time Mr. Ickes revealed that the pipe for the emergency 550-mile line from the east Texas oil fields to Illinois, designed to provide partial relief of the east coast oil supply by next Christmas, has already started coming from the mills of the National Tube Company. He went on to say that actual laying of the pipe along the route now being staked out from Texas across Arkansas and Missouri into southern Illinois is scheduled to begin sometime this month.

Meanwhile, the Senate commerce committee has favorably reported to the Senate H.R. 6999, the House bill which authorizes the construction of a barge canal across northern Florida and at least two pipelines designed to transport oil from the western coast of Florida to the eastern coast and from oil fields in Mississippi to either Savannah, Ga., or Charleston, S. C.

Not the Right Way to Load a Car Heavily

A loader of scrap metal conceived the "novel idea" of compressing junk scrap in gondola cars by the simple expedient of raising a huge weight as high as the crane would lift—allowing it to fall on the scrap in the car, without regard to the consequences to the car structure.

This isn't the right way to get heavy loads in cars—as Chairman W. C. Kendall of the Car Service Division points out in a circular calling attention to "a considerable amount of costly damage and unnecessary loss of car days to equipment, particularly open top cars, due to methods and practices employed in loading and unloading by shippers and consignees." Mr. Kendall has asked the Division's district managers to put their field men on the alert to develop from on-the-ground surveys instances of abuse to equipment. He also suggests that the subject could well be placed on the dockets of the contact and executive committees of the several Shippers' Advisory Boards, "with a view to securing the fullest measure of cooperation . . . to the end that this form of car waste shall be reduced to the lowest possible minimum."

Mr. Kendall's circular noted in particular the repair expense and wasted car days arising from the crane and clamshell methods of handling bulk commodities, and heavy or unwieldy shipments through lack of care exercised by those in charge of the work. He cited an instance of a large industry which performs its own plant switching, which "established an unenviable record by somehow cutting 47 air hose in one month, while loading and unloading railroad owned equipment within the industry."

Ordnance Department Urging Efficient Use of Cars

"Working with the Army, shippers of war materials and railroads are doing an outstanding job in the efficient utilization of railroad equipment," said a July 14 War Department statement telling how the Ordnance Department, Services of Supply, is nevertheless "pressing a vigorous campaign to utilize all railroad freight and express cars for more and faster shipments of munitions."

Cooperating with the Traffic Control Division in SOS's Transportation Service, the Ordnance Department "is emphasizing the importance of making every car do more work by full capacity loading and by releasing it without delay from all loading and delivery points." Army officers supervising rail transportation at all military stations, civilian traffic managers, plant superintendents, shipping clerks and receivers at ports of embarkation, manufacturing points, depots, and arsenals, "are stressing the fact that box and express cars are formidable weapons of war"; that "this fighting equipment makes possible the delivery of other weapons from the production to the fighting lines."

"Delay in loading and unloading the cars, the practices of detaining them on sidings and of using them as temporary warehouses by some receivers, together with improper and incomplete loading, and other factors tend to lessen our war drive," the Ordnance Department statement went on. "Careless handling may be as destructive to the contents of railway cars as hits by bombs or high explosive shells. The campaign also is reducing waste caused by rough handling."

Also, the statement noted indications in reports from the Association of American Railroads that demurrage charges are being cut as a result of more prompt release of cars by shippers; and that shippers are concentrating on heavier loading of cars. "The 'Keep 'em Moving' principle for using freight cars," the statement concluded, "was recognized as long ago as 1862, when United States military authorities ordered that 'all cars will be unloaded and returned immediately—they will not be detained for use as warehouses.'"

A. A. R. Conducting Conservation Drive

(*Continued from page 108*)

both ends of clay picks, welding claws on claw bars and other tools.

"We recommend that every railroad issue necessary instructions so that every pound of scrap paper, including car lining paper, burlap sacks, wrapping and rope from inbound shipments, can be saved and marketed.

"One railroad reports recovery of various kinds of paper from empty box cars while cars are being cleaned; all paper, including cardboard shipping boxes, recovered from stores and commissary departments, also all paper from freight houses. Paper cups and towels are recovered from passenger equipment, these items being placed in cloth bags by porters. Through this arrangement in one large terminal they have recovered approximately 60,000 pounds of scrap magazines and various railroad periodicals. Tariffs and old records, that are obsolete, should be salvaged for sale at this time."

"Every employee can assist in the conservation and reclamation of materials, even the office employees," the divisions added. "We are told that rubber bands and erasers will probably not be manufactured due to the scarcity of rubber. There will also be a large curtailment in the manufacture of pins, clips, and brass paper fasteners. It is important that all of these office supplies be conserved in every possible manner.

"It is our patriotic duty to reclaim and conserve all materials possible under present conditions and we urge upon every

railroad and railroad employee to do their part to conserve materials and thereby reduce the consumption, and when materials must eventually reach the scrapping limit, let us all see to it that such scrap materials reach proper markets so they can again be made available for use."

Through leaflets and posters the "Don't waste anything" campaign is being carried to all railroad employees in a five point program—"conserve, convert, use it up, make it do, and save the pieces."

House Committee Approves Two Transport Taxes

The House ways and means committee, which has been considering a new tax bill to meet the financial burden of the war, has approved a tax of 10 per cent on all transportation fares including seats and berths. Based on estimates submitted last year, this doubling of the present tax would yield something like $75,000,000 a year.

The committee has also approved a five per cent tax on all common and contract freight shipments with the single exception of coal which would be taxed at the rate of five cents per ton.

In connection with the tax on freight shipments, Leon Henderson, Administrator of the Office of Price Administration, has written a letter to the committee registering his opposition to such a proposal. He told the committee that the enactment of such a tax "obviously would constitute a very real breach in the ceiling of the cost of living."

"Bearing in mind that the tax would come right on top of the increase in freight rates which the Interstate Commerce Commission granted only a few months ago (and which his office opposed), you can readily see that its enactment would greatly complicate the already difficult job of controlling prices," wrote Mr. Henderson. It was also Mr. Henderson's view that the proposed tax is likely to discriminate against manufacturers in favor of distributors.

Materials and Prices

Following are references to orders of interest to railroads issued by the War Production Board and the Office of Price Administration since July 2.

Brake linings—Order M-123, as amended July 6, permits the use of asbestos in the manufacture of brake linings, clutch facings and other woven friction materials without an A-10 rating.

Inventories—Priorities Regulation No. 13, issued July 7, sets up new and uniform rules governing the sale of idle inventories of certain kinds and removes such specified sales from the existing regulations which affect the normal flow of material. The order is intended to permit the disposition of critical materials now frozen. Limitation orders, previously issued in anticipation of industrial conversion to war production and to conserve scarce materials, contain various provisions which restricted disposal of inventories frozen as a result of their terms. In some cases, certain permitted types of sale were listed in the original order, and in other cases, no sale might be made without specific authorization. These restrictions are now replaced by the conditions in the new regulation which permit sales without formalities or reports.

Lumber—Softwood construction lumber freeze order, L-121, which would have expired on July 13, was extended on July 10 to August 13 to provide sufficient time for the development of a system of distribution based on the relative importance of lumber for war purposes. The revised order releases additional grades and species of softwood lumber not being purchased by military agencies. The order also makes changes calculated to aid small saw mills and local distributors. In addition to deliveries for the Army, Navy, Maritime Commission and for certain military construction projects, the revised order permits producers to sell and deliver construction lumber for the repair and maintenance of railway rolling stock. Mills sawing less than 5,000 ft. per day are exempt from the restrictions of the order. Previous regulations exempted only mills sawing less than 5,000 ft. of both softwood and hardwood.

Off-rail machines—Supplementary Limitation Order L-53-b, issued July 7, prohibits the manufacture from July 1, 1942 to June 30, 1943 of more repair parts than 50 per cent of the total value of the production during 1941 of track-laying tractors and repair parts combined. Distributors and dealers, before making any sales of repair parts, must obtain a statement of the type of track-laying tractor to be repaired, the purpose for which it is to be used and the minimum quantity of parts necessary to put the equipment in serviceable condition.

Telephones—General Conservation Order L-50 as amended, regulating the installation of telephone equipment and establishing classes of essential users who are entitled to preference in obtaining telephone service, is clarified in a series of questions and answers issued July 6. As explained, the orders do not apply to teletypewriter and telegraph facilities and equipment. The order limits the replacement of all telephone equipment and facilities to the essential requirements of maintenance, repair or protection of this service.

Water coolers—Limitation Order L-126, issued July 6, requires an immediate reduction in sizes and types of drinking water coolers and refrigeration condensing units. Coolers have been reduced from 40 to 50 different types and sizes of electrically operated and 25 to 30 different types and sizes of ice coolers to a maximum of eight different sizes for the electric type and three for the ice cooling variety. Use of aluminum and block tin tubing or tin casting in self-contained water coolers is banned. Alloy steel, stainless steel, monel or other nickel alloy metals are also prohibited except in refrigerant and electric controls with the provision that such use be in the minimum amount practicable.

Gasoline—A new order, issued July 8, supplanting the present emergency card plan for conserving the East's limited gasoline supply, brings under rationing every type of gasoline user, except aircraft using high octane gasoline. Trucks, buses, taxies and occupational boats will be rationed for the first time, while coupons issued on a basis of need, except for a basic ration, are designed to eliminate all unnecessary mileage in private passenger car motoring. The orders require carpooling, a ceiling on ordinary occupational driving, the elimination of the X or unlimited use class of consumer and a highly restricted category of preferred users, cutting gasoline consumption drastically. A 50-mile border zone extending from Lake Ontario to the Gulf is set up in which gasoline users from the rationed area will not be able to buy gasoline either for their cars or any other purpose. Beginning July 31, no gasoline may be used in a motor vehicle registered in the rationed area and customarily garaged in that area unless a ration card has been issued the vehicle. A car to which a ration has been issued will be required, under another provision of the regulations, to display a sticker identifying the class of ration issued. Registration of motorists in 17 states will start on the morning of July 9 and continue through July 11.

Material handling—General Limitation Order L-112, relating to the production and distribution of industrial power trucks for handling material in and around shops, factories and warehouses, prohibits manufacturers, effective July 10, from accepting any order for an industrial power truck other than an order rated A-9 or higher on preference rating certificate PD-1A or PD-3A. In addition, no manufacturer may deliver, and no person may accept delivery of, any industrial power truck except on an order placed before July 10 bearing a rating of A-1-k or higher, or on an order placed after that date rated A-9 or higher on PD-1A or PD-3A. The order also prohibits manufacturers from beginning construction, after July 10, of any industrial power truck which is not a standard model as described in a manufacturer's catalogue as of that date and as specified in list A attached to the order.

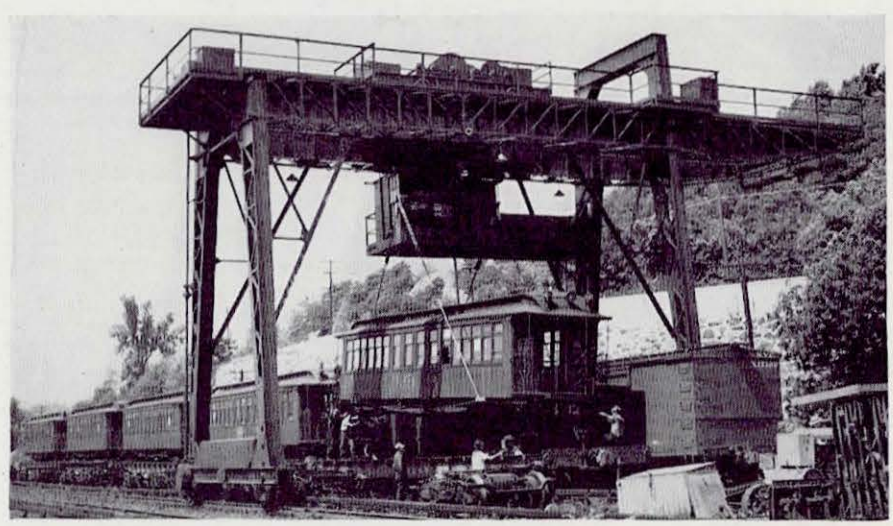
Prices

Iron and steel—The time limit within which distress stocks of iron and steel products subject to Revised Price Schedule No. 49 may be sold at special prices was extended from July 1 to October 1, 1942. The extension, contained in Amendment No. 6, covers products destined for export and shipped to a port prior to March 1, 1942, thus incurring charges for freight, insurance or storage.

Lumber—Maximum Price Regulation No. 26, establishing dollars and cents maximum prices for Douglas fir and other West Coast lumber, as amended July 6, permits an addition of $2 per thousand bd. ft. for dimension lumber which must meet the bending stress requirements, and an addition of $5 where the lumber must meet density requirements.

Wired glass—Maximum Price Regulation No. 175, relating to wire and heat-absorbing rolled glass, as issued July 6, fixes maximum prices at the levels prevailing in October, 1941.

* * *



Cars from New York's Dismantled Elevated Lines Being Loaded by the N. Y. Central for Shipment to Oakland, Calif., Where the Key System Will Use Them to Haul Shipyard Employees to Richmond

GENERAL NEWS

RRs' Diners Save Sugar and Coffee

One cup per person limit on several roads as supply is cut by rationing

Wartime limitations on sugar, tea and coffee have affected—in some instances rather drastically—normal practices in serving these beverages on trains on eastern railroads. As government limitations were first applied on the quantities of these commodities, servings to passengers had to be reduced, in the face of a substantial increase in dining car patronage. Recent modifications, particularly in the sugar rationing provisions, may ease the situation materially, it is reported, and some relaxation of the stringent measures adopted by several railroads during the late spring is in prospect or, in some instances, already in effect.

Steps taken to control consumption of the rationed articles have varied considerably among eastern railroads. The Chesapeake & Ohio, for example, resorted to an appeal for the voluntary cooperation of patrons. Pennsylvania menus in June carried a similar appeal, drawing attention to a limitation in supply, coupled with an increase of almost 100 per cent in customers, and announcing that "Coffee will be served at breakfast only, one cup per person. Tea will be served at the evening meal only. Sugar will be served by the waiter, on request." Service of coffee by waiters in coaches was discontinued about the same time.

As soon, however, as it became evident that government regulations would permit larger allotments of sugar, tea and coffee than first were proposed where, as on dining cars, business had shown a substantial growth, the Pennsylvania was able to introduce a more liberal policy. Coffee and tea were served when ordered, though second cups were not, and on certain trains limited service of coffee in coaches was resumed.

On several other eastern roads a somewhat similar liberalization of the rationing measures first adopted has been possible. As the situation is subject to sudden changes in government requirements, no permanent rules have been set up. The following summary of measures adopted on several railroads indicates, however, the restrictions that first seemed necessary.

The Lackawanna, reporting an 80 per cent increase in dining car business, has discontinued pastries using large quantities of sugar and has reduced by 25 per cent the quantity of dry coffee used to produce a given amount of the liquid. Pot service of coffee has been discontinued—one cup to a customer. Substitutes for sugar, such as syrup and honey, are used when possible. Sugar bowls are brought to the table only when requested, and promptly removed.

On the Boston & Maine also the customer is limited to one cup of coffee at a meal, but service in pots continues, to avoid spilling. On that road tea is restricted to a one-cup tea bag per person. Sugar is offered by the waiter, and portions are limited. The complimentary demi-tasse has been eliminated on New York Central diners, and service of extra cups of both tea and coffee is discouraged. Iced tea is prepared in advance instead of at table. Honey and syrup are used in preparing many dishes instead of sugar.

Sugar bowls are now kept in the pantry on Baltimore & Ohio diners, and waiters return them immediately after use. Only one cup of coffee is served with a meal—individual pots discontinued. The complimentary demi-tasse was ended on this road also, as well as coffee service by waiters in day coaches. Pots are used in serving hot tea, but iced tea is prepared in advance and served in glasses—no second servings.

On the New Haven coach service of coffee was stopped, and service in the diners and grill cars has been limited to one cup per person. Service of iced tea was eliminated, and the size of the tea bags for hot tea was reduced. Sugar comes in sealed individual containers holding one spoonful. Syrup has replaced sugar in making many desserts.

Dining car revenues on the Southern during the first five months of 1942 were double the corresponding 1941 figures, and the rationing problem on that road was correspondingly difficult. Service of coffee and tea is restricted to one cup per person, and sugar is served only on request. The Reading has depended to a large extent on the voluntary cooperation of patrons in reducing the use of coffee, tea and sugar on its diners. Pot service of coffee has been discontinued, and requests for second helpings are not encouraged. Sugar comes in individual envelopes, which run about 45 to the pound.

One pot of coffee per person is the limit on Norfolk & Western diners. Iced tea is prepared in the pantry, and each patron is limited to one glass. Sugar is served from bowls kept in the pantry. In cooking honey and syrup are used as far as possible in place of sugar.

Milwaukee Gives Safety Awards to Careful Supervisors

Nearly 500 supervisors of the Chicago, Milwaukee, St. Paul & Pacific, who have served the 12-year period from 1930 to 1941 without a personal injury to an employee under their jurisdiction have been awarded certificates for superior service signed by H. A. Scandrett, trustee.

Would Pull Off 70 Trains in Illinois

They wouldn't be missed badly and equipment could be put to better use

The curtailment of duplicate rail and bus service in Illinois was discussed by rail and bus representatives at a meeting called by the Illinois Commerce Commission at Springfield, Ill., on July 9, in response to a request by Joseph B. Eastman, director of the Office of Defense Transportation. About 70 railroad runs which could be eliminated without seriously inconveniencing the public, were given consideration. Most of these have shown losses in recent years or have been up before the commission previously for abandonment. In about 50 per cent of the instances, the cases are already docketed with the commission.

It was estimated that the suspensions suggested would result in transferring 21 locomotives, 11 motor trains, and 62 pieces of passenger equipment to other uses. To release this equipment the railroads suggested the abandonment of the following schedules, most of them round-trip: Alton, trains No. 11 and 12, Chicago to St. Louis, Mo., and St. Louis to Springfield and service from Bloomington, Ill., to Roodhouse; Chicago & Eastern Illinois, one train between Chicago and St. Louis and one train between Chicago and Evansville, Ind.; Chicago & North Western, Geneva, Ill., to Clinton, Iowa, and Crystal Lake, Ill., to Wisconsin points; Chicago, Burlington & Quincy, seven local runs in northern and western Illinois; Cleveland, Cincinnati, Chicago & St. Louis, Mt. Carmel, Ill., to Cairo; Illinois Central, Effingham, Ill., to Indianapolis, Ind.; Illinois Terminal (electric), six trains between Decatur, Ill., and Danville and six trains between Decatur and Mackinaw Junction, Ill.; Louisville & Nashville, four trains between St. Louis and Evansville, Ind.; Missouri-Illinois (controlled by the Missouri Pacific), Salem, Ill., to Kellogg; New York, Chicago & St. Louis, Peoria, Ill., to Frankfort, Ind.; Southern, St. Louis to Louisville, Ky.; and Wabash, Decatur to Hannibal, Mo.

Bus company officials discussed informally some moves that have been made to combine schedules, but made no suggestions as to means of eliminating runs duplicating railroad service, and William E. Helander, acting chief examiner of the Illinois Commerce Commission was authorized to appoint a committee to make a survey for the elimination of duplicating bus services which is to report by July 23.

4½ Million Troops Moved in 5 Months

Movement equals that of 13 months of World War I, Board is told

Approximately 4,500,000 troops, not including those traveling on furlough, were moved by the railroads within the continental United States in the first five months of this year, according to Ralph E. Clark, assistant to the chairman of the Car Service division of the Association of American Railroads, before the fifty-ninth regular meeting of the Mid-West Shippers Advisory Board at Chicago on July 9. This large number of men, Mr. Clark added, is about as many troops as the American railroads carried in comparable movements during the first 13 months that this country was in World War I. As the war progresses, Mr. Clark declared, the volume of military traffic will increase, and the railroads will have an even bigger job to do.

"We are told," he said, "that the army will reach 4½ million men by the end of this year, and this will mean from five to seven passenger movements for every man from the time of induction into service until departure from our shores for foreign duty."

According to Mr. Clark, troop movements, together with the return of traffic to the rails due to the lack of rubber and rationing of gasoline, are largely responsible for the tremendous rise in the railroads' passenger business, which for the first four months of this year was 88 per cent greater than in the corresponding period in 1939 and 44 per cent above the same period in 1941. Besides handling the increased passenger traffic, the "railroads today are doing the greatest freight transportation job in their entire history," he stated. Measured in ton-miles, the performance in the first five months of 1942 has never been exceeded in any five months of any year on record.

In his opening remarks, Fred A. Schleifer, general chairman of the board, stated that "with the support of the Office of Defense Transportation, the Interstate Commerce Commission and the Association of American Railroads, shippers need have no fears of a general car shortage in 1942." In commenting upon the achievements of the railroads in past months, he pointed out that during May the railroads hauled 25 per cent more freight, in 2 per cent fewer cars, than in May, 1941, and that locomotives are rendering 160 per cent more service than during World War I.

A. H. Schwietert, chairman of the Chamber of Commerce and L.c.l. Merchandise committee, reported that the reduction in the number of cars required in the handling of l.c.l. traffic following the order of the Office of Defense Transportation calling for heavier loadings has exceeded all expectations. In the Mid-West Board area, heavier loading has reduced the number of cars required for l.c.l. merchandise as much as 49½ per cent. In the Chicago area, a total of 52,434 cars were loaded in May and June, compared with 81,916 cars during the same period in 1941, a reduction of 36 per cent. For the 8 weeks period from May 1 to June 20, 777,931 cars, were used, compared with 1,273,732 cars in the same period last year, a reduction of 40 per cent. "If," he continued, "we had used the same number of cars for the handling of l.c.l. merchandise in 1942 that were used in 1941, we would have found that instead of loading a total of 844,913 cars of revenue freight during the week ending May 20, we would have loaded 910,603 cars, a figure which is only 12,000 cars less than we used in the October peak loading of 1941."

In reporting as chairman of the Central Vigilance Committee on Car Efficiency Mr. Schwietert pointed out that during April, 70.3 per cent of the cars in the Chicago district were released within 24 hr. 16.65 per cent between 24 and 48 hr. and only 13.05 per cent over 48 hr. The average detention time was 1.2 days.

Shipments of grain originating in the Mid-West area during the third quarter of 1942 should about equal shipments during the corresponding quarter in 1941, according to Lawrence Farlow, chairman of the grain committee. Production of wheat in this area will be below that of any recent year and only a little more than 50 per cent of last year's production, and as a result, it can be expected that shipments of wheat will decline in proportion to the smaller crop. New crop oats will be harvested during this quarter and will also contribute substantially to the grain movement. This crop in the Mid-West area should be about equal to last year's production and the movement should be in about the same proportion. Harvesting of new crop soybeans may be under way during the last week or ten days of this quarter, but this movement will not be important until the fourth quarter. Production is expected to show an increase of 45 per cent in Illinois, and 30 per cent in Iowa, while for the Mid-West territory it is expected to aggregate 95,000,000 bushels for 1942, compared with 70,000,000 bushels in 1941.

M. P. Gets Relief from Trucking Restriction

Reporting after reconsideration of the case involving the Missouri Pacific's truck route between the Kansas-Nebraska state line and Omaha, the Interstate Commerce Commission, Division 5, has modified that restriction which stipulated that shipments transported in the highway operation "shall be limited to those moving under a through bill of lading covering, in addition to movement by truck, a prior or subsequent movement by rail." Instead, the commission has imposed the so-called "key point" condition, stipulating that "no shipments shall be transported wholly by motor vehicle between Kansas City, Mo., and St. Joseph, on the one hand, and Omaha, Nebr., on the other hand."

In its petition for modification, the M. P. asserted that the "prior or subsequent haul" condition "does not tend to promote coordinated truck-rail service, but instead tends to impair efficient and economical motor-carrier operation."

Another $500,000 for Study Board

Senate committee would give it $228,000 more than Budget estimate

Increasing the Budget Bureau's estimate by $228,000, the Senate committee on appropriations has proposed for the Transportation Board of Investigation and Research a fiscal 1943 appropriation of $500,000 in addition to the Board's unexpended balances from previous appropriations. The latter, amounting to $143,330 as of July 1, would make the fiscal year's total $643,330, as compared with the Board's annual-basis estimate of $675,000 and the $415,330 recommended by the Bureau of the Budget.

The proposed appropriation is carried in the First Supplemental National Defense Appropriation Bill, 1943, which was reported to the Senate this week. Hearings on the bill before a Senate appropriations committee sub-committee show how Board Chairman Nelson Lee Smith had testified that the Budget Bureau estimate represented a cut of "more than 50 per cent" below the Board's estimate, and that "it also means a reduction substantially below our present rate of appropriation for the fiscal year 1942—approximately $448,000 on an annual basis." Also, Mr. Smith suggested that if only the amount recommended by the Budget Bureau were appropriated, "it will be necessary for us to come back with a supplementary request at some later date, or to curtail our program" in connection with the study of the relative economy and fitness of carriers—the "major field of our activities."

Mr. Smith insisted that the Board's estimate contained "no slack or leeway," because "in our small organization we have no publicity or public relations people, automobiles, elaborate publications or other trimmings." Nevertheless the annual payroll for the 141 employees was running about $430,000, as compared with less than $370,000 provided in the Budget recommendation. Later, Board Member C. E. Childe told the subcommittee that a cut to the Budget estimate would necessitate the discharge of 60 employees before the end of the fiscal year on June 30, 1943, thus upsetting the Board's plan to transfer to the economy and fitness study employees working on the public aids, taxation and interterritorial freight rate studies which are expected to be completed by the first of next year.

As the Senate was approving the $500,000 when it took up the bill item by item on July 14, Senator McKellar, Democrat of Tennessee, who was chairman of the appropriations sub-committee, told Majority Leader Barkley how the committee had felt that the Budget estimate would not give the Board sufficient funds. Mr. Barkley said that he, too, had felt that the estimate "was skimping the Board, if it is to do a real job," adding that he was "on the verge of congratulating the committee for increasing the amount, because I think the Board is doing good work." Senator Mc-

News continued on next left-hand page

Expand . . . the railroads' capacity WITH LIMA SUPER-POWER LOCOMOTIVES

Freight traffic conditions today call for hauling heavier loads at passenger speeds. Modern power expands the capacity of the railroad by producing more ton-miles per locomotive hour.

On many roads throughout the country Lima Super-Power Steam Locomotives, like the famous 2-6-6-6 "Allegheny Type" freight locomotives shown above, are keeping 'em rolling . . . fast . . . with few interruptions in traffic.

LIMA LOCOMOTIVE WORKS INCORPORATED

LIMA LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO

Kellar seemed to agree; for he told Senator Pepper, Democrat of Florida, that "very excellent progress is being made." Whereupon Mr. Barkley spoke up again to anticipate that during the next two years "the Board will submit a constructive report."

The Board's request for funds came up at this time because of President Roosevelt's recent order extending its life for two years from next September 18. Its current appropriation had been set up to run to September 18, but the extension put it back on the fiscal-year basis. At the hearings before the Senate subcommittee, Chairman Smith again faced Senator McKellar, who last December drew from Board Member Robert E. Webb the commitment to make the interterritorial rate study, which was not among the specific assignments given the Board in the Transportation Act of 1940. Mr. McKellar was still interested in the interterritorial rate study, although he seemed already to have definite ideas as to what it should show in the way of discrimination against the South.

Before getting into that, however, the Senator questioned whether the work of the Board was of any "practical importance" at this time when "all of our transportation is being used, and all forms of transportation are being used." The Tennesseean went on to suggest that the economy and fitness question "ought to be postponed until a more convenient day," because "if we lose this war you will not have anything to do, because Hitler will have his own form of transportation over here." Chairman Smith thought that "we all recognize that fact," and then he went on to tell about the Board's work, to defend its estimates, and to outline the present status of its studies.

When he came to the interterritorial freight rate study, he conceded that "progress has perhaps not been quite as rapid as some might have wished"; but he was "sure" that those interested in the study expect it "to be conducted in a thorough and impartial fashion." Senator McKellar, however, seemed more interested in when the study would be completed. As indicated above, he has his own ideas as to what it should show. "All of the West and all of the South," he said, "are suffering from a very disordered and partial system of freight rates, which are operating tremendously against our section of the country and to the benefit of other sections of the country." Chairman Smith promised the report "not later than January 1," adding that the study would cost $35,000. He explained that 19 full-time employees have been assigned to it; and Senator McKellar asked for a list of the 19 together with information as to what section of the country each came from.

Chairman Smith next undertook to indicate some of the complications in the interterritorial rate situation, pointing out that the study should, among other things, analyze the economic effects on industrial development of the present rate structure. "I can tell you the economic effects of it right now," said Senator McKellar. "It has enriched one section of the country at the expense of the other two sections of the country. We all know that." Later, in discussing the situation with Mr. Childe, the Senator asserted: "If you were to report that there was not any discrimination now, your report would not be worth 'two bits' in my mind and in anybody else's mind, because everybody knows that discrimination now exists."

Mr. Childe replied that the present controversy "has been going on for 50 years and no one has settled it." Whereupon, Senator McKellar said that if the Board did something about it, Congress would follow through on the recommendations. "We propose," Mr. Childe replied, "to point out to Congress how this should be done and we believe, if you give us an opportunity, that we will point it out and something will be done to correct the situation."

Rate and Classification Probes Will Go On

The Interstate Commerce Commission has denied petitions filed by the railroads, American Trucking Associations, the National Industrial Traffic League and others, seeking suspension for the duration of the war of further proceedings in the general investigations of rail and motor rates and classifications. The proceedings are: No. 28300, Class Rate Investigation, 1939; No. 28310, Consolidated Freight Classification; No. MC-C-150, Motor Freight Classification; and No. M-C-200, Motor Carrier Class Rate Investigation. Further hearings in the first two are scheduled for September 22 at Indianapolis, Ind.

Ex Parte 148 Intrastate Rates

The Interstate Commerce Commission has instituted an investigation into the refusal of the Public Service Commission of Utah to permit railroads serving that state to bring their intrastate freight rates on certain commodities into line with the Ex Parte 148 adjustment authorized for intrastate traffic. The proceeding is docketed as No. 28848.

Also, the commission has received from railroads operating in Montana a petition seeking a like investigation of a similar adverse action on the part of the Board of Railroad Commissioners of Montana.

1941 Freight Commodity Statistics by Geographical Areas

The Interstate Commerce Commission's Bureau of Transport Economics and Statistics has made public its compilation of 1941 data on tons of carload revenue freight originated and tons terminated by classes of commodities and by geographical areas. The data are for Class I railroads.

As in 1940, the Commonwealth of Pennsylvania led last year in both tons originated and tons terminated for all commodities, the respective figures being 218,686,551 tons and 160,214,920 tons. The breakdown by commodity groups shows that state leading also in products of mines originated—159,918,389 tons; and in both originated and terminated tonnages of manufactures and miscellaneous—56,898,611 tons originated and 44,759,676 tons terminated. Meanwhile Ohio led in the tonnage of products of mines terminated, its total being 116,454,405 tons as compared with Pennsylvania's 106,602,699 tons.

Illinois led in the products-of-agriculture group with 10,028,930 tons originated and 10,816,682 tons terminated; also, in animals and products—2,570,279 tons originated and 2,187,670 tons terminated. Oregon led in products of forest originated (9,031,342 tons), while Washington was on top as to terminated tonnage for that group—7,462,291 tons. The statement also shows forwarder traffic originated and terminated; and there New York and Illinois led, the former with 945,859 tons originated and the latter with 625,929 tons terminated. Total 1941 forwarder traffic was 3,464,942 tons originated and 3,630,375 tons terminated.

Minimum Wage Report Unopposed

After a brief hearing in New York July 15, the report of the special industry committee recommending the establishment of a general 40 cents per hour minimum wage rate on all railroads is in the hands of the Administrator of the Wage and Hour Division of the U. S. Department of Labor for final action. The character of this report was outlined in *Railway Age* of May 9, page 915. No additional testimony was introduced at the public hearing. As the railroads have offered no opposition to the proposal of the committee, legal arguments were omitted, and an early decision is expected.

Would Provide Minimum Pension of $50 Per Month

Liberalization of Railroad Retirement Act benefits to provide minimum annuities and pensions of $50 a month for persons with 30 years of service retiring at 65 years of age or on account of total disability is proposed in H. R. 7365 which has been introduced by Representative Van Zandt, Republican of Pennsylvania. Under the bill, the annual cost, amounting to $4,620,000, would be borne by the federal government without increased taxes on railroads or their employees.

Commenting on his proposal in an extension of remarks which he inserted into the appendix to the July 9 Congressional Record, Mr. Van Zandt gave figures as of June 30, 1941, which showed that "nearly one-half" of the 31,080 pensioners and "approximately 30 per cent" of the 113,183 annuitants were receiving less than $50 a month. The pensioners are those taken over from former railroad pension systems, while the annuitants are those who have retired since enactment of the Railroad Retirement Act. He went on to say that the Railroad Retirement Board "has stated it is out of the question to increase the taxing rate on the employer and employee."

Thus the provision that the federal government absorb the additional cost, in which connection Mr. Van Zandt quoted from the Retirement Board's report for the year ended June 30, 1940, a suggestion to the effect

News continued on next left-hand page

"The Question of Sustained Power at Speeds becomes a Question of Mean Effective Pressure in the Cylinders."

— From a report issued by the office of Mechanical Engineer of the A. A. R. in Feb. 1939.

THE
FRANKLIN SYSTEM OF Steam Distribution

Sustained power at speeds has long been the goal of steam locomotive design.

The Franklin System of Steam Distribution opens new horizons for the steam locomotive by enabling it to produce 30 to 40% more horsepower through the development of maximum mean effective pressure.

This is made possible by:

1. Separation of valve events, so that admission, cut-off, release and compression are independently controlled.
2. Larger inlet and exhaust passages and improved steam flow.
3. Reduced cylinder clearance volume.
4. Increased mechanical efficiency, obtained by reduced weight of moving masses, reduced friction and elimination of carbonization.

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

that the federal government might well contribute to the railroad retirement system an amount equal to what its additional contribution to the social security system would be if the railroad employees were covered thereunder. Also, Mr. Van Zandt said it was his understanding that a program is "being perfected" with a view to liberalize the entire Retirement Act. He added that "suitable amendments may be presented to Congress within the next 60 or 90 days as a result of the study now in progress." As noted in the *Railway Age* of February 28, page 454, the Board's latest annual report for the year ended June 30, 1941, revealed that consideration was being given to such matters as liberalization of the dissability retirement provisions, and "more adequate" survivor benefits.

Retirement Board to Request Return of Pensioned Workers

The Railroad Retirement Board, Chicago, announced on July 14 that 40,000 retired railroad employes receiving pensions or annuities soon will receive application blanks and letters asking if they would like to return to railroad jobs for the duration of the war because of critical labor shortages.

Workers awarded annuities under the railroad retirement act of 1937 will not receive annuities for any month in which they work for a railroad. The payments will be reinstated, however, on the first of the month following the last in which compensated service was performed.

P.R.R. Adds Women to New York Station Ticket Staff

About 25 young women have been added during this month to the staff of information clerks and ticket sellers in Pennsylvania Station, New York. This step—taken to relieve the growing shortage of available men resulting from wartime conditions—is not completely novel, as women were similarly employed during World War I to a limited extent, but it represents a departure from the practice of recent years. The women selected for this work are college graduates, and they undergo a special course of training under the direction of the stationmaster before taking up their duties. They will be assigned to work both in the Long Island and main line portions of the station.

"Steel for Victory" Film to Be Shown to Public

"Steel for Victory," a dramatic film depicting the all-out war production of United States Steel Corporation subsidiaries, will be exhibited in 2,500 motion picture theatres beginning July 15. The new picture was originally previewed at the recent annual meeting of U. S. Steel stockholders. It carries the voice of Vincent Pelletier over a continuous background of music and sound effects.

Included in the film are scenes of the manufacturing processes employed in making steel, armor plate, tank armor, shell forgings, bomb casings and naval vessels. One steel-making sequence shows how huge ingots weighing as much as 500,000 pounds are teamed and later forged under tremendous pressure to make armor plate for the Navy. Three new additions to U. S. Steel's Great Lakes fleet, the giant ore carriers "Irving S. Olds," "Benjamin F. Fairless" and "Enders M. Voorhees," are shown as they were side-launched at inland shipyards. The three vessels are the largest ever built for inland service.

Freight Car Loading

Loadings of revenue freight for the week ended July 11 totaled 855,124 cars, the Association of American Railroads announced on July 16. This was an increase of 101,269 cars or 13.4 per cent above the preceding week which included the holiday, a decrease of 21,018 cars or 2.4 per cent below the corresponding week last year, and an increase of 118,341 cars or 16.1 per cent above the comparable 1940 week.

As reported in last week's issue, loadings of revenue freight for the week ended July 4 totaled 753,855 cars, and the summary for that week, compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For Week Ended Saturday, July 4

District	1942	1941	1939
Eastern	141,152	146,126	126,860
Allegheny	165,698	158,977	133,627
Pocahontas	36,432	40,178	43,890
Southern	108,595	102,146	82,802
Northwestern	125,439	126,994	107,013
Central Western	114,412	114,456	98,983
Southwestern	62,127	51,482	43,994
Total Western Districts	301,978	292,932	249,990
Total All Roads	753,855	740,359	637,169
Commodities			
Grain and grain products	42,340	50,921	47,628
Live stock	9,508	7,970	8,876
Coal	120,350	93,858	103,555
Coke	12,578	12,638	10,439
Forest products	44,431	37,287	25,019
Ore	85,946	71,756	65,778
Merchandise l.c.l.	82,036	138,611	127,236
Miscellaneous	356,666	327,318	248,638
July 4	753,855	740,359	637,169
June 27	853,441	908,604	752,647
June 20	844,913	885,539	728,493
June 13	832,726	862,974	712,921
June 6	854,689	852,940	702,892
Cumulative Total, 27 Weeks	21,813,860	20,591,091	17,551,704

In Canada.—Carloadings for the week ended July 4 were 60,368 as compared with 67,336 in the previous week and 56,938 in the corresponding week last year, according to the summary of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
July 4, 1942	60,368	37,319
June 27, 1942	67,336	35,804
June 20, 1942	66,121	34,630
July 5, 1941	56,938	28,775
Cumulative Totals for Canada:		
July 4, 1942	1,699,567	875,841
July 5, 1941	1,550,661	787,751
July 6, 1940	1,351,840	662,083

East-West Through Rate Hearings Close

The hearings on the dispute over the division of joint through rates between the Eastern railroads and six western railroads were closed on July 14, with the completion of rebuttal testimony, before A. R. Mackley, Interstate Commerce Commission examiner at Chicago, who set November 1 as the date for the filing of briefs. The six Western roads involved; the Chicago Great Western; the Chicago, Rock Island & Pacific; the Kansas City Southern; the Missouri-Kansas-Texas; the Missouri Pacific and the St. Louis San Francisco; refused a compromise adjustment of differences over the proper division of joint through rates which was agreed upon by the Eastern roads and other Western roads in December, 1931, contending that mileage, upon which the divisions formula was based, could not provide a fair measure for divisions of rates because of the different traffic density and earning power on Eastern roads as compared to Western roads.

Southern Roads Seek Coach Fare Increase

Southern railroads have applied to the Interstate Commerce Commission for authority to increase their basic coach fares from 1.65 cents per mile to 2.2 cents, thus bringing them up to the basic rates in effect in othtr sections. The petition states that the proposed increase would not result in a reduction in travel, but would wipe out the petitioners' deficit from passenger operations and yield a slight contribution towards return on investment.

The average net loss from passenger service in Southern Territory during the past six years has been $22,121,962, the petition said. Projecting the proposed increase throughout 1942 on the basis of the first quarter's traffic it was estimated that the higher fare would augment the current year's passenger revenues by $13,891,008.

May Earnings in Canada

In May the Canadian National had $29,687,000 of gross revenue (up $2,961,230 from last year). Its operating expenses were $21,917,309 (a $2,980,379 increase). Net operating revenues were $7,769,691—a decline of $19,149. For the five months operating revenues were $137,626,000 (up $21,552,864); expenses were $107,553,050 (up $16,759,683); and operating net was $30,072,950 (a $4,793,181 rise).

The Canadian Pacific in May had gross totaling $21,522,075 (a $2,245,404 increase). Expenses were $17,288,515 (increase, $2,193,663). Operating net was $4,233,560 (up $51,741). For the five months, gross totaled $99,788,426 (a rise of $18,444,305). Expenses were $82,014,708 (up $16,521,977) and operating net totaled $17,773,718 ($1,922,328 more than in 1941).

Vandals Derail Panama Limited

A deliberate attempt was made to wreck the southbound Panama limited, streamliner of the Illinois Central, early in the morning of July 14, when two cars were derailed near Tipton, Tenn., 25 miles north of Memphis, according to the Federal Bureau of Investigation. The accident was caused by vandals who pulled the inside spikes on 14 ties, removed one pair of angle bars and moved the end of the rail inward, in much the same manner that a rail was moved to cause the wreck of the City of San Francisco near Carlin, Nev., on August 12, 1939.

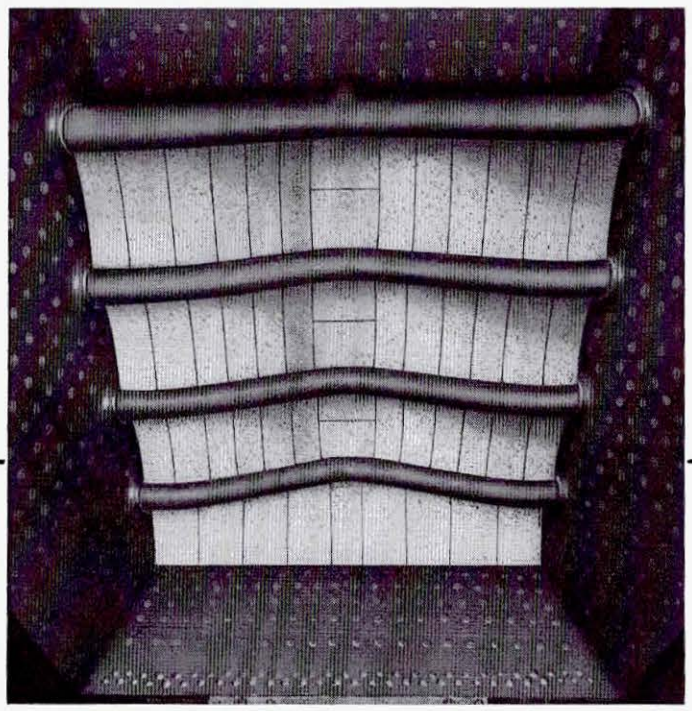
The observation car and one Pullman were derailed. The remainder of the train, consisting of a Diesel locomotive, a baggage car, a dining car and five more Pullmans, remained on the rails, and was brought to a stop 2,108 ft. beyond the

News continued on next left-hand page

A CORRECT BRICK ARCH GUARANTEES

FULL FUEL ECONOMY

There is a carefully worked out design of the Security Brick Arch for every class of locomotive . . . This design guarantees maximum efficiency both as to fuel economy and hauling capacity . . . In modernizing existing power and in maintaining locomotives in active service, be sure the correct brick arch design is installed and be sure it is completely maintained.



There's More to
SECURITY ARCHES
Than Just Brick

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists

AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.
Locomotive Combustion Specialists

point of accident. Four persons were slightly injured.

Indications at the scene of the accident were that all wheels passed safely over the point of accident except the rear trucks of the observation car, which became derailed. This in turn caused the derailment of the front trucks of that car and of the Pullman immediately ahead. The observation car became disconnected from the train after causing the derailment of the Pullman ahead and rolled down a 25-ft. embankment 806 ft. beyond the point of accident, with the north end 40 ft. from the track and the south end 25 ft. from the track.

The Pullman that was derailed remained on the ties and did not become uncoupled. All other wheels remained on the rails. The observation car was damaged considerably in the accident, but the remainder of the train continued its trip four hours later.

May Accident Statistics

The Interstate Commerce Commission on July 8 made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for May and this year's first five months. The compilation, which is subject to revision, follows:

Item	Month of May		5 months ended with May	
	1942	1941	1942	1941
Number of train accidents*	1,041	726	5,158	3,348
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	187	214	697	705
Injured	141	160	583	668
Passengers on trains:				
(a) In train accidents*				
Killed	....	....	12	4
Injured	40	71	428	562
(b) In train-service accidents				
Killed	....	1	10	2
Injured	158	120	805	670
Travelers not on trains:				
Killed	3	....	6	1
Injured	60	66	309	379
Employes on duty:				
Killed	58	59	358	256
Injured	2,602	1,882	12,270	8,471
All other nontrespassers:**				
Killed	174	141	947	823
Injured	465	465	2,929	2,756
Total — All classes of persons:				
Killed	422	415	2,030	1,791
Injured	3,466	2,764	17,324	13,506

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than $150 to railway property.

** Casualties to "Other nontressers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers*, were as follows:

Persons:				
Killed	162	122	869	752
Injured	310	285	2,149	1,950

Certificates for Seatrain Lines

Seatrain Lines, Inc., operator of freight-car-carrying vessels, has been granted Interstate Commerce Commission certificates covering operations as a common carrier by water of commodities generally between New York and New Orleans, La., and between New York and Texas City, Tex. Seatrain had "grandfather" rights on the former route, while it made a showing of public convenience and necessity with respect to the New York-Texas City operation, started after January 1, 1940.

Seatrain's vessels have been requisitioned by the United States Maritime Commission; but the I. C. C. held that this interruption of service is one over which the applicant had no control. Meanwhile, however, that part of the "grandfather" application which sought authority to transport passengers was denied.

How Steel Co. Led Home Town in Scrap-for-Victory Drive

How an industrial concern enabled its home community to establish what is believed to be a record for the collection of war-use salvage is disclosed in a booklet currently issued by the Lukens Steel Company, of Coatesville, Pa. The company explains that, engaged 100 per cent in war work, it is acutely conscious of the importance of salvage collection because, on occasion, it has been forced to shut down steel-making furnaces due to lack of iron and steel scrap. Lukens Steel, therefore, planned, launched and led a Coatesville salvage-collection drive that yielded a total of 616,065 lb. of iron and steel scrap. By the last census Coatesville's population is 14,582, and, hence, the drive's per-capita "score" was 46.68 lb., or about 226.92 lb. from each Coatesville home.

Scrap collected included 616,065 lb. of iron and steel, 9,410 lb. of rubber, 3,233 lb. of other metal scrap, 44,688 lb. of paper, 7,365 lb. of rags and an unlisted quantity of miscellaneous. All the scrap metal, rubber and rags were sold to local junk dealers; the paper was sold to paper mills near Coatesville; and Lukens Steel bought the scrap iron and steel.

The booklet, copies of which are available, explains how the steel company en-

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS

Compiled from 132 Reports (Form IBS) Representing 136 Steam Railways
(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways			
	For the month of April		For the four months of	
	1942	1941	1942	1941
1. Net railway operating income	$102,034,442	$52,074,736	$324,749,827	$252,401,447
2. Other income	11,602,227	10,666,070	46,587,385	44,797,828
3. Total income	113,636,669	62,740,806	371,337,212	297,199,275
4. Miscellaneous deductions from income	2,658,936	2,219,693	10,121,039	9,518,131
5. Income available for fixed charges	110,977,733	60,521,113	361,216,173	287,681,144
6. Fixed charges:				
6-01. Rent for leased roads and equipment	13,722,032	13,045,373	54,605,782	50,489,004
6-02. Interest deductions[1]	37,030,693	38,508,986	148,143,296	153,818,375
6-03. Other deductions	113,850	118,075	469,927	474,145
6-04. Total fixed charges	50,866,575	51,672,434	203,219,005	204,781,524
7. Income after fixed charges	60,11,158	8,848,679	157,997,168	82,899,620
8. Contingent charges	2,221,456	1,550,256	8,577,236	6,155,789
9. Net income	57,889,702	7,298,423	149,419,932	76,743,831
10. Depreciation (Way and structures and equipment)	20,744,317	17,898,712	77,029,654	71,127,469
11. Amortization of Defense Projects	6,278,596	.....	19,648,825	.....
12. Federal income taxes	52,612,470	7,104,766	139,007,807	33,236,438
13. Dividend appropriations:				
13-01. On common stock	270,000	2,306,668	19,522,803	26,281,636
13-02. On preferred stock	778,185	764,781	5,933,278	5,209,076
Ratio of income to fixed charges (item 5 ÷ 6-04)	2.18	1.17	1.78	1.40

Selected Asset and Liability Items	All Class I Railways, Balance at End of April	
	1942	1941
20. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	$464,745,682	$560,946,071
21. Cash	799,887,773	673,819,405
22. Temporary cash investments	135,598,227	71,455,665
23. Special deposits	155,461,239	123,326,657
24. Loans and bills receivable	1,149,446	1,771,422
25. Traffic and car-service balances—Dr.	37,979,741	26,910,949
26. Net balance receivable from agents and conductors	96,467,258	54,827,539
27. Miscellaneous accounts receivable	267,246,387	145,447,934
28. Materials and supplies	528,839,754	368,807,309
29. Interest and dividends receivable	20,122,448	17,875,491
30. Rents receivable	1,121,418	1,215,552
31. Other current assets	26,527,860	6,931,675
32. Total current assets (items 21 to 31)	$2,070,401,551	$1,492,389,598
40. Funded debt maturing within 6 months[2]	95,188,929	95,583,395
41. Loans and bills payable[3]	33,079,832	77,455,048
42. Traffic and car-service balances—Cr.	74,461,468	45,804,220
43. Audited accounts and wages payable	310,319,848	236,739,373
44. Miscellaneous accounts payable	57,862,134	49,053,123
45. Interest matured unpaid	49,440,755	35,424,149
46. Dividends matured unpaid	2,167,777	1,709,819
47. Unmatured interest accrued	78,709,046	80,043,614
48. Unmatured dividends declared	5,445,248	1,297,510
49. Unmatured rents accrued	26,231,700	26,580,718
50. Accrued tax liability	466,845,600	248,913,350
51. Other current liabilities	56,030,647	36,437,663
52. Total current liabilities (items 41 to 51)	1,160,594,055	839,458,587
53. Analysis of accrued tax liability:		
53-01. U. S. Government taxes	353,436,628	139,785,580
53-02. Other than U. S. Government taxes	113,408,972	109,127,770

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.
[3] Includes obligations which mature not more than 2 years after date of issue.

News continued on next left-hand page

The main arteries and branch lines are continuously carrying our necessities of life throughout the entire nation—in addition to the ceaseless movement of supplies and men for the Army and Navy.

Keep this railroad traffic at a high tempo—by well-maintained steam locomotives.

A-1512

ELESCO

SUPERHEATERS • FEEDWATER HEATERS
AMERICAN THROTTLES • STEAM DRYERS
EXHAUST STEAM INJECTORS • PYROMETERS

THE SUPERHEATER COMPANY

Representative of
AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
122 S. Michigan Blvd., CHICAGO
• • •
Montreal, Canada
THE SUPERHEATER COMPANY, LTD.

NET INCOME OF LARGE STEAM RAILWAYS

(Switching and Terminal Companies Not Included)

Name of railway	Net Income After Depreciation and Amortization of Defense Projects — For the four months of April		Net Income Before Depreciation and Amortization of Defense Projects — For the four months of April	
	1942	1941	1942	1941
Alton	$420,864	* $245,571	$515,475	* $154,748
Atchison, Topeka & Santa Fe System[3]	12,306,113	3,532,533	17,220,981	7,574,566
Atlantic Coast Line	6,834,676	4,087,328	8,289,121	4,873,733
Baltimore & Ohio	6,562,538	2,476,197	10,174,960	4,975,920
Boston & Maine	1,919,308	1,683,474	2,537,527	2,157,159
Central of Georgia[2]	314,838	63,044	660,109	351,094
Central of New Jersey[2]	568,121	* 1,117,005	1,036,225	* 677,116
Chesapeake & Ohio	7,809,295	6,887,023	11,220,670	9,742,617
Chicago & Eastern Illinois	471,243	504,522	679,131	710,512
Chicago & North Western[2]	* 138,093	* 1,663,534	1,727,727	* 53,736
Chicago, Burlington & Quincy	4,545,124	2,737,199	6,781,577	4,581,659
Chicago Great Western	496,436	294,887	688,829	483,360
Chicago, Milwaukee, St. Paul & Pacific[2]	1,936,519	166,693	4,794,232	2,186,383
Chicago, Rock Island & Pacific[2]	3,198,246	269,766	4,706,218	1,724,932
Chicago, St. Paul, Minneapolis & Omaha	* 427,750	* 753,239	* 227,839	* 572,985
Delaware & Hudson	1,463,117	608,713	2,139,535	990,715
Delaware, Lackawanna & Western	954,328	884,994	1,787,249	1,709,786
Denver & Rio Grande Western[2]	1,008,500	* 1,616,744	1,631,954	* 1,182,169
Duluth, Missabe & Iron Range	* 221,282	* 1,407,843	274,624	* 1,114,327
Elgin, Joliet & Eastern	993,201	1,828,493	1,950,890	2,238,652
Erie	3,524,749	1,662,826	5,760,953	2,892,660
Grand Trunk Western	* 689,618	754,854	* 233,532	1,144,616
Great Northern	498,563	* 1,395,939	3,171,492	37,517
Gulf, Mobile & Ohio	699,181	586,146	1,015,936	869,428
Illinois Central	2,771,784	3,344,896	5,479,953	5,585,821
Lehigh Valley	626,648	820,002	1,788,931	1,487,601
Long Island	* 519,531	* 589,352	196,107	* 68,651
Louisville & Nashville	4,199,521	4,251,593	6,595,959	5,732,954
Minneapolis, St. Paul & Sault Ste. Marie[2]	* 1,879,252	* 2,350,316	* 1,174,736	* 1,924,322
Missouri-Kansas-Texas	936,543	* 672,909	1,315,951	* 288,105
Missouri Pacific[2]	4,148,856	* 968,777	5,720,620	533,485
New York Central[4]	7,385,535	6,824,352	15,029,798	12,870,019
New York, Chicago & St. Louis	2,638,664	2,590,061	3,364,705	3,142,147
New York, New Haven & Hartford[2]	3,833,783	765,171	5,246,221	1,874,324
Norfolk & Western	6,361,569	7,945,605	9,930,172	10,156,604
Northern Pacific	1,327,926	* 720,013	3,907,204	416,808
Pennsylvania	8,648,829	9,688,230	20,056,469	19,059,368
Pere Marquette	616,195	1,183,998	1,634,252	1,950,205
Pittsburgh & Lake Erie	1,259,590	1,503,637	2,327,730	2,300,619
Reading	3,550,944	2,630,239	5,149,535	3,641,890
St. Louis-San Francisco[2]	617,809	* 1,014,009	1,627,232	* 11,207
St. Louis, San Francisco & Texas	46,034	* 10,941	46,034	* 10,941
St. Louis Southwestern[2]	1,632,426	1,209,383	1,867,543	1,426,472
Seaboard Air Line[1]	3,828,830	579,521	4,666,694	1,391,165
Southern	5,390,308	4,400,522	8,335,459	5,625,432
Southern Pacific[5]	15,090,987	6,388,684	19,938,030	9,070,109
Texas & Pacific	1,370,254	851,324	1,806,651	1,273,484
Union Pacific (including leased lines)	7,231,368	2,302,944	10,600,615	5,006,333
Wabash	1,594,448	482,385	2,612,132	1,205,895
Yazoo & Mississippi Valley	2,698,301	97,276	2,878,431	277,775

* Deficit.
[1] Report of receiver or receivers.
[2] Report of trustee or trustees.
[3] Includes Atchison, Topeka & Santa Fe, Gulf, Colorado & Santa Fe; and Panhandle & Santa Fe.
[4] Includes Boston & Albany, lessor to New York Central.
[5] Includes Southern Pacific Company, Texas & New Orleans, and leased lines. The report contains the following information: "Figures reported for Southern Pacific Transportation System exclude offsetting debits and credits for interest on funded securities and rentals for leased properties between companies included therein. Operations for 1942 of separately operated Solely Controlled Affiliated Companies (excluding results for Southern Pacific Railroad Company of Mexico), not included in income results for the System, resulted in a net loss of $1,668 for the month and $378,770 for the period. These results include $195,577 for the month and $782,308 for the period representing interest on bonds of such companies owned by Southern Pacific Company not taken into income by S. P. Co. and therefore, not included in the 1942 income results for the System. The combined results for 1942 for Southern Pacific Transportation System and separately operated Solely Controlled Affiliated Companies (excluding S. P. R. R. Co. of Mexico) amounted to a net income of $4,676,129 for the month and $15,494,525 for the period. Figures herein given exclude results of S. P. R. R. Co. of Mexico for the reason that policy was adopted January 1, 1940 of making no further advances to that company, it being required to conduct its operations entirely within its own resources."

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

listed the co-operation of Coatesville's public officials, its daily newspaper, such organizations as the Red Cross, the Chamber of Commerce and the Council of Defense, and finally of Coatesville's men, and women and children.

Train Becomes Temporary Station

While its passenger station at Sudbury, Ont., is undergoing major alterations to increase its capacity and modernize its facilities, the Canadian Pacific is handling its passenger business at that point in a four-car train parked on a nearby siding. At one end of the train is a coach that serves as the women's rest room and waiting room. Next to it is an express car which contains the ticket windows and station-master's office. This joins another coach fitted up as the men's waiting room and rest room, while the fourth car is equipped as a short-order restaurant, with counter space for 55 people.

Quarter Million People Ride "400" Fleet in Six Months

In the six months since the enlarged fleet of "400" trains of the Chicago & North Western began operating on January 12, more than 250,000 passengers have been carried. The trains have averaged more than 3,200 miles daily since their inauguration, making a total of nearly 600,000 miles traveled in this period.

Equipment and Supplies

Freight Car Deliveries Are Off Sharply in June

The number of new freight cars delivered during June totaled 6,088 as compared with 8,324 in the preceding month of May, a decrease of 2,236 cars or 26.9 per cent. Of this number, about 859 cars were delivered by railroad company shops and 5,229 by contract car builders, which compares with 751 by railroad company shops and 7,573 by contract car builders in May.

Plants of contract car builders during June operated at 39.2 per cent of rated capacity as compared with an operating rate of 56.8 per cent in May. Of the 5,229 cars completed by contract car builders during June, 2,827 were for domestic service, as compared with 5,700 delivered for domestic service during May, a decrease of 2,873 cars or 50.4 per cent. Deliveries by contract car builders for export rose during June to 2,402 cars as compared with 1,873 in May.

As a result of production limitations and the lack of steel, some individual car building plants during the month virtually suspended operations. Thus two plants of a leading builder with monthly rated capacities of 550 and 400 cars respectively, completed but 10 and 43 cars respectively during the month. Two plants of another builder with capacity output rated at 1,200 cars each, delivered but 132 and 336 respectively.

The number of freight cars delivered during the first six months of 1942 totaled 52,401, including 9,867 by railroad company shops and 42,534 by contract car builders. Of this latter number, 37,407 were for domestic service and 5,127 for export. Deliveries thus far this year for domestic service only totaled 47,274 cars.

The backlog of cars on order and undelivered with contract car builders at June 30 totaled 39,889 of which 29,989 were on order for domestic railroad companies, with the balance comprising cars for industrial companies and private car lines, U. S. Government departments, export and lend-lease.

FREIGHT CARS

THE DENVER & RIO GRANDE WESTERN has placed orders for a total of 1,000 new gondola cars, allocating 500 general service and 50 65-ft. mill-type gondolas to the Pressed Steel Car Company and 450 50-ton tight-bottom gondolas to the Mount Vernon Car Manufacturing Company. This railroad was reported to be inquiring for 1,500 gondola cars in the *Railway Age* of February 28.

THE MISSOURI PACIFIC LINES have received a release from the War Production Board's transportation equipment branch covering 650 gondola cars which will be built by the Pressed Steel Car Company. This railroad was listed in the reported allocation of the final 18,000 freight cars authorized for 1942 construction, pub-

lished in the *Railway Age* of June 20, as having been allocated only 570 gondola cars.

PASSENGER CARS

THE CENTRAL DO BRAZIL RAILWAY has authorized the purchase of 49 steel passenger coaches to be constructed by the Pullman Standard Export Company and the American Car & Foundry Co., at a cost not to exceed $4,300,000.

Supply Trade

Clifford O. Richards, assistant purchasing agent for the **Taylor-Wharton Iron & Steel Co.,** has been promoted to purchasing agent, to succeed **R. C. Schaeffer,** who has resigned.

Allan Wallace, director of traffic of the **Johns-Manville Corporation** since 1937, retired on June 30. Mr. Wallace became traffic manager for this company in 1914. Previous to his career in industrial traffic management, he was in the service of predecessor companies to the Canadian National, and of fast freight lines operated by that railway and the Lehigh Valley.

The **Long-Bell Lumber Company** has purchased from the **American Lumber & Treating Company,** creosoting plants at Joplin, Mo., and DeRidder, La. These plants were built by the American Lumber & Treating Company in 1937 and have since been operated under contract by the Long-Bell Lumber Company for the creosote pressure treatment of the lumber company's product.

C. Granniss Bonner, formerly comptroller and more recently treasurer of the Brunswick-Balke-Collender Company, Chicago, has been elected treasurer of **Pomona Pump Company,** Pomona, Cal., succeeding to a portion of the duties of **Donald C. McKenna,** vice-president and treasurer, who will devote full time to the production activities of the company's four manufacturing plants.

Local plants in Worcester, Mass., of the **American Steel & Wire Co.,** U. S. Steel subsidiary, recently were awarded the Navy "E" for excellence in production. A crowd of 3,500 employees of the company watched Rear Admiral Wat T. Cluverius, U.S.N., Ret., present the emblem to C. F. Hood, company president. Four veteran employees of the company were presented with Navy "E" buttons to symbolize award of the honor to all of the Worcester district employees.

An Army rally and dedication for former employees of the **J. G. Brill Company** who are now in the armed forces was held July 8 at the company's plant in Philadelphia, Pa. A plaque containing the honor roll of some 200 names was unveiled by a mother whose three sons' names are on the Brill honor roll and whose husband is employed in the Brill plant. Some 2,000 workers and guests gathered for the ceremonies and heard addresses by L. E. Hess, president of the company; the Honorable Bernard Samuel, mayor of Philadelphia; Colonel D. N. Hauseman, deputy chief of the Philadelphia Ordnance district; and Louis Zelle, president of Lodge 1263, United Steel Workers of America.

OBITUARY

D. W. Lloyd, southwestern manager of the Westinghouse Air Brake Company, with headquarters in St. Louis, Mo., died July 4 following a critical operation. After being graduated in mechanical engineering from Pennsylvania State College, Mr. Lloyd entered the employ of the Westinghouse Air Brake Company in October, 1911. He was for some time associated with the company's engineering and commercial activities at headquarters in Wilmerding, Pa. In 1928 he was transferred to the St. Louis office, where he served as district engineer until his promotion to the position of southwestern manager in August, 1941.

Emmett K. Conneely, manager of railroad sales of the Republic Steel Corporation, Cleveland, Ohio, died at the Eye and Ear Hospital, Pittsburgh, Pa., on July 10. Mr. Conneely was born at Bolivar, N. Y., in 1884 and served in various capacities with the Pittsburgh & Lake Erie during his early business life, joining the Standard Steel Car Company at Baltimore, Md., in 1917. He was later connected with the New York Air Brake Company as vice-president and a director, and in 1925 he was made New York representative of the Pullman Company. He was subsequently made vice-president of the Standard Steel Car Company at Chicago, which position he held until March, 1933. In September, 1933, he went with the Republic Steel Corporation as manager of railroad sales.

Robert F. Runge, vice-president of SKF Industries, Inc., Philadelphia, Pa., died July 6 in Germantown hospital after a prolonged illness. He was 56 years of age. Mr. Runge was graduated from Drexel Institute in 1906 and went to work in the engineering department of the Hess-Bright Manufacturing Company, which later became SKF. His entire business career was spent with SKF and its predecessor. He became vice-president in 1920.

Robert F. Runge

Financial

ATCHISON, TOPEKA & SANTA FE.—*Abandonment.*—This road has applied to the Interstate Commerce Commission for authority to abandon its 9.87-mile line, known as the "Three Sands District," from Marland, Okla., to Lio.

ATCHISON, TOPEKA & SANTA FE.—*Abandonment by the New Mexico Central.* The New Mexico Central and the Atchison, Topeka & Santa Fe, respectively, have asked the Interstate Commerce Commission for authority to abandon a line and the operation thereof extending from Moriarty, N. Mex., to Stanley, 11.6 miles.

ATLANTIC COAST LINE.—*Abandonment.*—The Interstate Commerce Commission, Division 4, has authorized this road to abandon a 1,309-ft. piece of track connecting its line with that of the Seaboard Air Line in Morriston, Fla.

BOSTON & MAINE.—*Abandonment.*—This road has applied to the Interstate Commerce Commission for authority to abandon its 5.5-mile line between Hamilton-Wenham, Mass., and Essex.

CHESAPEAKE & OHIO.—*Acquisition and Operation.*—This road has applied to the Interstate Commerce Commission for authority to acquire from the Valley and operate over 1.9 miles of tracks near Lexington, Va., and East Lexington.

CHICAGO & EASTERN ILLINOIS.—*Abandonment.*—This company has been denied authority by Division 4 of the Interstate Commerce Commission to abandon its Judyville branch extending in an easterly direction from a connection with the main line at Rossville Junction, Ill., to the end of the line at Judyville, Ind., 13.3 miles. Division 4 found that "operation of the branch during the last five years was profitable to the applicant and the record indicates that there will be an increase in traffic in the future."

ERIE.—*Acquisition and Securities.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to purchase the properties of the Northern of New Jersey, including all the issued and outstanding stock of the Nyack & Southern. To carry out the purchase the Erie was authorized to issue $957,862 of preferred stock, series A, and 9,992 shares of no-par common stock or scrip for any or all of the preferred stock.

ERIE.—*Bond Redemption and Retirement.*—Notice has been given that the Erie has elected to redeem on August 29, $5,955,850 of first consolidated mortgage 4¾ per cent bonds, series A, due January 1, 1957 (see previous item, *Railway Age*, June 11). The railroad, through sinking fund operations, retired on July 10, $955,500 of general mortgage income 4½ per cent bonds due 2015, thereby reducing the amount of bonds outstanding to $51,649,916.

ERIE.—*Control of Paterson & Hudson River.*—This road has been authorized by

News continued on second left-hand page

the Interstate Commerce Commission to acquire control of the Paterson & Hudson River through purchase of a majority of its capital stock. The Erie's subsidiary, Southern Tier Development Company, already owns 6,295 shares of the P. & H. R.'s 12,600 shares, and Erie's plan is to purchase 300 additional shares. The acquisition, the decision said, "is the initial step in the Erie's contemplated plan for eventually purchasing the properties of the Paterson & Hudson River."

LEHIGH VALLEY.—*Independent Trustee for Wabash Shares.*—The Marine Midland Trust Company of New York has been appointed independent trustee to vote 258,929 shares, or 20 per cent, of this railroad's common stock which are owned by the Wabash. This action was required in connection with completion of the Wabash reorganization so as to secure the independence of directors and management as between the Lehigh Valley, the Wabash, the Pennsylvania or others.

MINNEAPOLIS & ST. LOUIS. — *Sale of Property.*—The sale of this road, originally set for May 15, has been further adjourned to July 24.

MISSOURI PACIFIC. — *Abandonments.*—This road has filed with the Interstate Commerce Commission six separate applications, seeking authority to abandon three segments of its own line and to abandon operation of three sections of the Marion & Eastern—all in Williamson County, Ill. The total mileage involved is 16.3, the sections ranging from 1.52 mi. to 6.5 mi.

Later the Marion & Eastern came in with three separate applications for authority to abandon the three sections of its line on which the M. P. would abandon operations.

NORTHERN PACIFIC. — *Sells Equipment Trust.*—A Group composed of Shields & Co. and Bear, Sterns & Co. on July 15 were awarded a new issue of $2,500,000 of equipment trust certificates, Series B, of this road on a bid of 99.1399 for 2 per cent obligations. The certificates will mature from August 15, 1943, to 1952 inclusive.

NORTHERN PACIFIC. — *Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to assume liability for $2,500,000 of equipment trust certificates, series B, the proceeds to be used to finance in part the purchase of 12 freight locomotives of the 4-6-6-4 type at a cost of $3,247,183.

PENNSYLVANIA.—*Equipment Trust Certificates.*—Because of orders of the War Production Board this company has informed the Interstate Commerce Commission that it has been unable to obtain the following equipment recently authorized in Finance Docket No. 13567: 1,107 50-ton steel box cars. 1,989 55-ton hopper cars; 1,000 70-ton gondola cars; 300 70-ton hopper cars; and 50 cabin cars costing a total of $13,392,850.

In place of this equipment the company desires to substitute the following new equipment costing a total of $14,270,000: 500 50-ton hopper cars; 500 70-ton gondola cars; 500 50-ton gondola cars; 49 2-10-4 steam locomotives; and five GGI type electric locomotives.

READING. — *Abandonment.* — Acting on this company's request, Division 4 of the Interstate Commerce Commission has dismissed its recent application in Finance Docket No. 13529 wherein it sought authority to abandon a portion of a line in Ashland, Pa.

SEABOARD AIR LINE. — *Equipment Trust Certificates and RFC Financing.*—This company has asked the Interstate Commerce Commission to approve a plan whereby it would issue $2,280,000 of 2¾ per cent equipment trust certificates which would be either sold to the Reconstruction Finance Corporation or guaranteed by it. The proceeds of the issue, which would mature in 20 semiannual installments beginning January 1, 1943, would be used to purchase new equipment costing a total of $3,069,760 and consisting of six 5,400 h.p. Diesel-electric freight locomotives and two 1,000 h.p. Diesel-electric switching locomotives.

SEABOARD AIR LINE. — *Reorganization Hearing.*—Details of a plan of reorganization of this railroad, submitted by a committee for the underlying bondholders, were described before the special master at the United States district court in New York on July 10. The committee differs from others on the distribution of new securities, claiming that the "synthetic" earnings of the years 1936, 1937, 1938 and 1940 are not a fair basis for the distribution. According to the committee's statement, "The record on reorganization shows that the claims of general creditors and stockholders of Seaboard are valueless. As the holders of the junior liens of the system, the general mortgagees are, therefore, the holders of the equity in Seaboard. The reorganization of Seaboard is primarily for the benefit of the holders of the equity or the three general mortgagees." Capitalization of the new company at $204,835,000 has been supported by the committees for the first and consolidated mortgage bonds, the receivers' certificates and the underlying bonds.

SOUTHERN PACIFIC. — *Abandonment.* — This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a portion of the so-called Oakdale branch extending from Montpelier, Calif., to Merced, 21.1 miles.

SOUTHERN PACIFIC. — *Abandonment by the Petaluma & Santa Rosa.*—The Petaluma & Santa Rose has asked the Interstate Commerce Commission for authority to abandon its Two Rock branch extending from Liberty, Calif., to Two Rock, 5.4 miles.

SOUTHERN PACIFIC. — *Substitution of Equipment.* — The Interstate Commerce Commission, Division 4, has modified its order of March 25 in Finance Docket No. 13658 so as to permit this road to substitute 12 oil-burning locomotives of the 4-8-8-2 type for some of the box cars originally proposed to be acquired through the $5,660,000 certificate issue. The decision states that War Production Board restrictions will preclude obtaining delivery on all of the box cars. It also reveals that the locomotives, to be built by the Baldwin Locomotive Works, would cost $250,000.57 each or a total of $3,000,006.84; and that WPB "has authorized the necessary priorities for the materials entering into the construction of the locomotives."

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.—*Improvements in St. Louis, Mo. and East St. Louis, Ill.*—The City of East St. Louis, Ill., has asked the Interstate Commerce Commission to reaffirm its finding in Finance Docket No. 8519 to the effect that the present and future convenience and necessity require this company to (a) operate over the Douglas MacArthur Bridge owned by St. Louis and all approaches as now constructed and (b) to construct a union station in East St. Louis with tracks leading to and from the station and to and from the tracks of any railroad using the facilities thereof and connections with the present facilities and with tracks leading to and from the eastern approaches to the Douglas MacArthur Bridge.

At the same time the City of St. Louis, Mo., has asked the commission in the same proceeding to require the Terminal Railroad Association to remove certain elevated tracks and structures and to substitute therefor double tracks in order that the City may complete the construction of the Jefferson National Expansion Memorial. Both cities contend that the Terminal Railroad agreed to make these changes and was granted authority to do so by them and the Interstate Commerce Commission in 1930, but to date has refused to make the improvements.

UTICA, CLINTON & BINGHAMTON.—*Dissolution Sought.*—Approval for the dissolution of this railroad has been sought from the New York State Public Service Commission. The action involves payment of $206,820 by the New York State Railway-Utica lines and the Delaware & Hudson to the Utica, Clinton & Binghamton for certain properties and franchises, which amount would be used to pay off mortgages on the property, with the remaining going to the stockholders.

WABASH.—*Interest on Income Bonds and Dividends on Preferred Stock.*—The Interstate Commerce Commission has dismissed for want of jurisdiction a petition which sought an order directing the reorganization managers of this road to make prompt payment of interest on income bonds and dividends on preferred stock for the year ending December 31, 1941. The petitioner, Walter G. Peterkin, was the owner of prereorganization refunding and general mortgage bonds for which he has received or is entitled to receive income bonds and preferred stock as part payment therefor.

WESTERN MARYLAND. — *Abandonment.* — The Interstate Commerce Commission, Division 4, has authorized this road to abandon its 5.4-mile line from Thomas, W. Va., to Davis.

Average Prices of Stocks and Bonds

	July 14	Last week	Last year
Average price of 20 representative railway stocks..	26.36	25.87	30.37
Average price of 20 representative railway bonds ..	64.21	64.17	65.61

lished in the *Railway Age* of June 20, as having been allocated only 570 gondola cars.

PASSENGER CARS

THE CENTRAL DO BRAZIL RAILWAY has authorized the purchase of 49 steel passenger coaches to be constructed by the Pullman Standard Export Company and the American Car & Foundry Co., at a cost not to exceed $4,300,000.

Supply Trade

Clifford O. Richards, assistant purchasing agent for the **Taylor-Wharton Iron & Steel Co.,** has been promoted to purchasing agent, to succeed **R. C. Schaeffer,** who has resigned.

Allan Wallace, director of traffic of the **Johns-Manville Corporation** since 1937, retired on June 30. Mr. Wallace became traffic manager for this company in 1914. Previous to his career in industrial traffic management, he was in the service of predecessor companies to the Canadian National, and of fast freight lines operated by that railway and the Lehigh Valley.

The **Long-Bell Lumber Company** has purchased from the **American Lumber & Treating Company,** creosoting plants at Joplin, Mo., and DeRidder, La. These plants were built by the American Lumber & Treating Company in 1937 and have since been operated under contract by the Long-Bell Lumber Company for the creosote pressure treatment of the lumber company's product.

C. Granniss Bonner, formerly comptroller and more recently treasurer of the Brunswick-Balke-Collender Company, Chicago, has been elected treasurer of **Pomona Pump Company,** Pomona, Cal., succeeding to a portion of the duties of **Donald C. McKenna,** vice-president and treasurer, who will devote full time to the production activities of the company's four manufacturing plants.

Local plants in Worcester, Mass., of the **American Steel & Wire Co.,** U. S. Steel subsidiary, recently were awarded the Navy "E" for excellence in production. A crowd of 3,500 employees of the company watched Rear Admiral Wat T. Cluverius, U.S.N., Ret., present the emblem to C. F. Hood, company president. Four veteran employees of the company were presented with Navy "E" buttons to symbolize award of the honor to all of the Worcester district employees.

An Army rally and dedication for former employees of the **J. G. Brill Company** who are now in the armed forces was held July 8 at the company's plant in Philadelphia, Pa. A plaque containing the honor roll of some 200 names was unveiled by a mother whose three sons' names are on the Brill honor roll and whose husband is employed in the Brill plant. Some 2,000 workers and guests gathered for the ceremonies and heard addresses by L. E. Hess, president of the company; the Honorable Bernard Samuel, mayor of Philadelphia; Colonel D. N. Hauseman, deputy chief of the Philadelphia Ordnance district; and Louis Zelle, president of Lodge 1263, United Steel Workers of America.

OBITUARY

D. W. Lloyd, southwestern manager of the Westinghouse Air Brake Company, with headquarters in St. Louis, Mo., died July 4 following a critical operation. After being graduated in mechanical engineering from Pennsylvania State College, Mr. Lloyd entered the employ of the Westinghouse Air Brake Company in October, 1911. He was for some time associated with the company's engineering and commercial activities at headquarters in Wilmerding, Pa. In 1928 he was transferred to the St. Louis office, where he served as district engineer until his promotion to the position of southwestern manager in August, 1941.

Emmett K. Conneely, manager of railroad sales of the Republic Steel Corporation, Cleveland, Ohio, died at the Eye and Ear Hospital, Pittsburgh, Pa., on July 10. Mr. Conneely was born at Bolivar, N. Y., in 1884 and served in various capacities with the Pittsburgh & Lake Erie during his early business life, joining the Standard Steel Car Company at Baltimore, Md., in 1917. He was later connected with the New York Air Brake Company as vice-president and a director, and in 1925 he was made New York representative of the Pullman Company. He was subsequently made vice-president of the Standard Steel Car Company at Chicago, which position he held until March, 1933. In September, 1933, he went with the Republic Steel Corporation as manager of railroad sales.

Robert F. Runge, vice-president of SKF Industries, Inc., Philadelphia, Pa., died July 6 in Germantown hospital after a prolonged illness. He was 56 years of age. Mr. Runge was graduated from Drexel Institute in 1906 and went to work in the engineering department of the Hess-Bright Manufacturing Company, which later became SKF. His entire business career was spent with SKF and its predecessor. He became vice-president in 1920.

Robert F. Runge

Financial

ATCHISON, TOPEKA & SANTA FE.—*Abandonment.*—This road has applied to the Interstate Commerce Commission for authority to abandon its 9.87-mile line, known as the "Three Sands District," from Marland, Okla., to Lio.

ATCHISON, TOPEKA & SANTA FE.—*Abandonment by the New Mexico Central.* The New Mexico Central and the Atchison, Topeka & Santa Fe, respectively, have asked the Interstate Commerce Commission for authority to abandon a line and the operation thereof extending from Moriarty, N. Mex., to Stanley, 11.6 miles.

ATLANTIC COAST LINE.—*Abandonment.*—The Interstate Commerce Commission, Division 4, has authorized this road to abandon a 1,309-ft. piece of track connecting its line with that of the Seaboard Air Line in Morriston, Fla.

BOSTON & MAINE.—*Abandonment.*—This road has applied to the Interstate Commerce Commission for authority to abandon its 5.5-mile line between Hamilton-Wenham, Mass., and Essex.

CHESAPEAKE & OHIO.—*Acquisition and Operation.*—This road has applied to the Interstate Commerce Commission for authority to acquire from the Valley and operate over 1.9 miles of tracks near Lexington, Va., and East Lexington.

CHICAGO & EASTERN ILLINOIS.—*Abandonment.*—This company has been denied authority by Division 4 of the Interstate Commerce Commission to abandon its Judyville branch extending in an easterly direction from a connection with the main line at Rossville Junction, Ill., to the end of the line at Judyville, Ind., 13.3 miles. Division 4 found that "operation of the branch during the last five years was profitable to the applicant and the record indicates that there will be an increase in traffic in the future."

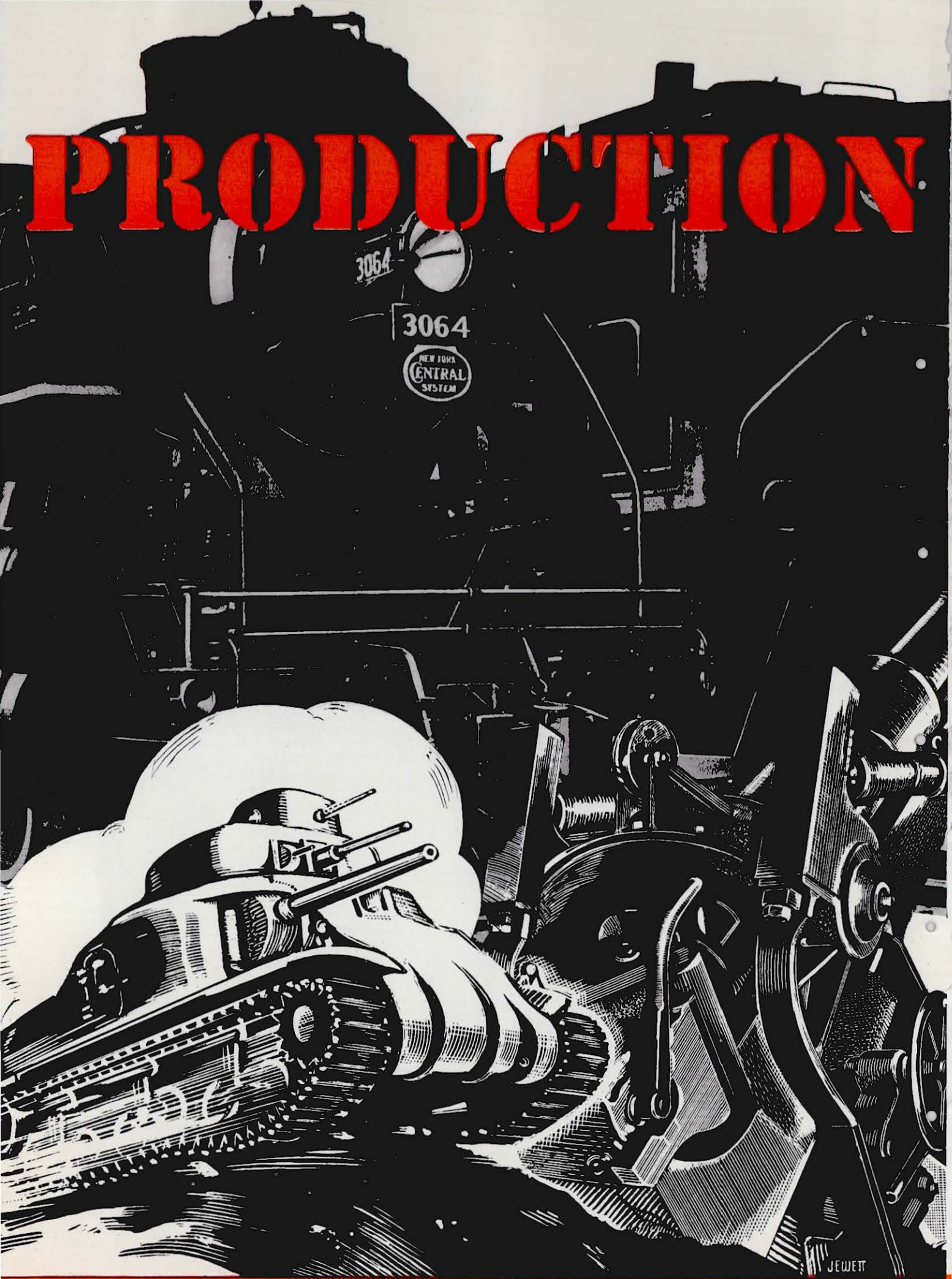
ERIE.—*Acquisition and Securities.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to purchase the properties of the Northern of New Jersey, including all the issued and outstanding stock of the Nyack & Southern. To carry out the purchase the Erie was authorized to issue $957,862 of preferred stock, series A, and 9,992 shares of no-par common stock or scrip for any or all of the preferred stock.

ERIE.—*Bond Redemption and Retirement.*—Notice has been given that the Erie has elected to redeem on August 29, $5,955,850 of first consolidated mortgage 4¾ per cent bonds, series A, due January 1, 1957 (see previous item, *Railway Age*, June 11). The railroad, through sinking fund operations, retired on July 10, $955,500 of general mortgage income 4½ per cent bonds due 2015, thereby reducing the amount of bonds outstanding to $51,649,916.

ERIE.—*Control of Paterson & Hudson River.*—This road has been authorized by

News continued on second left-hand page

PRODUCTION



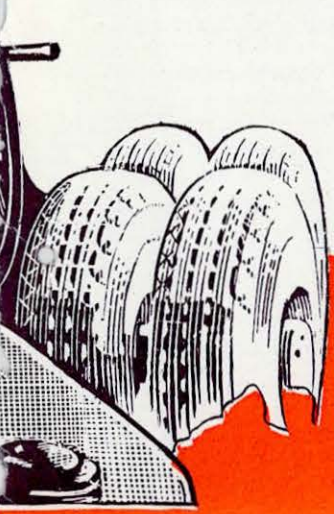
makes HEADLINES

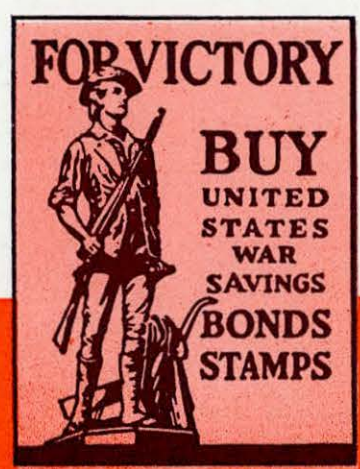
First to get into production on medium tanks, American Locomotive is now rolling them out at a far greater rate than already stepped-up contract obligations. Moreover, coming off the line today, they bear only a faint resemblance to the first ones produced a little over a year ago. Progressive design and manufacturing developments have greatly increased their effectiveness.

Gun carriages are being currently delivered at a far greater rate than required by our contract. All of Alco's orders for fragmentation bombs have been completed ahead of schedule. Shell production, too, is well ahead of expectations.

And our railroads need locomotives. Over and above the responsibility of an immense increase in their own traffic, they are being called upon to handle more and more traffic which in peace times depended almost entirely on steamships and trucks. Our railroads must continue to expand and Alco, therefore, continues to build locomotives.

Expansion and conversion of facilities on so gigantic a scale is never an easy job, but it was comparatively simple for Alco. Years of experience in building giant locomotives have given Alco the confidence, the tools and the know-how to tackle big jobs.





AMERICAN LOCOMOTIVE

Manufacturers of Mobile Power

Steam, Diesel and Electric Locomotives, Marine Diesels, Tanks, Gun Carriages and other Ordnance

the Interstate Commerce Commission to acquire control of the Paterson & Hudson River through purchase of a majority of its capital stock. The Erie's subsidiary, Southern Tier Development Company, already owns 6,295 shares of the P. & H. R.'s 12,600 shares, and Erie's plan is to purchase 300 additional shares. The acquisition, the decision said, "is the initial step in the Erie's contemplated plan for eventually purchasing the properties of the Paterson & Hudson River."

LEHIGH VALLEY. *Independent Trustee for Wabash Shares.*—The Marine Midland Trust Company of New York has been appointed independent trustee to vote 258,929 shares, or 20 per cent, of this railroad's common stock which are owned by the Wabash. This action was required in connection with completion of the Wabash reorganization so as to secure the independence of directors and management as between the Lehigh Valley, the Wabash, the Pennsylvania or others.

MINNEAPOLIS & ST. LOUIS. — *Sale of Property.*—The sale of this road, originally set for May 15, has been further adjourned to July 24.

MISSOURI PACIFIC. *Abandonments.*—This road has filed with the Interstate Commerce Commission six separate applications, seeking authority to abandon three segments of its own line and to abandon operation of three sections of the Marion & Eastern—all in Williamson County, Ill. The total mileage involved is 16.3, the sections ranging from 1.52 mi. to 6.5 mi.

Later the Marion & Eastern came in with three separate applications for authority to abandon the three sections of its line on which the M. P. would abandon operations.

NORTHERN PACIFIC. *Sells Equipment Trust.*—A Group composed of Shields & Co. and Bear, Sterns & Co. on July 15 were awarded a new issue of $2,500,000 of equipment trust certificates, Series B, of this road on a bid of 99.1399 for 2 per cent obligations. The certificates will mature from August 15, 1943, to 1952 inclusive.

NORTHERN PACIFIC. — *Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to assume liability for $2,500,000 of equipment trust certificates, series B, the proceeds to be used to finance in part the purchase of 12 freight locomotives of the 4-6-6-4 type at a cost of $3,247,183.

PENNSYLVANIA.—*Equipment Trust Certificates.*—Because of orders of the War Production Board this company has informed the Interstate Commerce Commission that it has been unable to obtain the following equipment recently authorized in Finance Docket No. 13567: 1,107 50-ton steel box cars, 1,989 55-ton hopper cars; 1,000 70-ton gondola cars; 300 70-ton hopper cars; and 50 cabin cars costing a total of $13,392,850.

In place of this equipment the company desires to substitute the following new equipment costing a total of $14,270,000: 500 50-ton hopper cars; 500 70-ton gondola cars; 500 50-ton gondola cars; 49 2-10-4 steam locomotives; and five GGI type electric locomotives.

READING. *Abandonment.* Acting on this company's request, Division 4 of the Interstate Commerce Commission has dismissed its recent application in Finance Docket No. 13529 wherein it sought authority to abandon a portion of a line in Ashland, Pa.

SEABOARD AIR LINE. — *Equipment Trust Certificates and RFC Financing.* This company has asked the Interstate Commerce Commission to approve a plan whereby it would issue $2,280,000 of 2¾ per cent equipment trust certificates which would be either sold to the Reconstruction Finance Corporation or guaranteed by it. The proceeds of the issue, which would mature in 20 semiannual installments beginning January 1, 1943, would be used to purchase new equipment costing a total of $3,069,760 and consisting of six 5,400 h.p. Diesel-electric freight locomotives and two 1,000 h.p. Diesel-electric switching locomotives.

SEABOARD AIR LINE. — *Reorganization Hearing.* Details of a plan of reorganization of this railroad, submitted by a committee for the underlying bondholders, were described before the special master at the United States district court in New York on July 10. The committee differs from others on the distribution of new securities, claiming that the "synthetic" earnings of the years 1936, 1937, 1938 and 1940 are not a fair basis for the distribution. According to the committee's statement, "The record on reorganization shows that the claims of general creditors and stockholders of Seaboard are valueless. As the holders of the junior liens of the system, the general mortgagees are, therefore, the holders of the equity in Seaboard. The reorganization of Seaboard is primarily for the benefit of the holders of the equity or the three general mortgagees." Capitalization of the new company at $204,835,000 has been supported by the committees for the first and consolidated mortgage bonds, the receivers' certificates and the underlying bonds.

SOUTHERN PACIFIC. — *Abandonment.* This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a portion of the so-called Oakdale branch extending from Montpelier, Calif., to Merced, 21.1 miles.

SOUTHERN PACIFIC. — *Abandonment by the Petaluma & Santa Rosa.*—The Petaluma & Santa Rose has asked the Interstate Commerce Commission for authority to abandon its Two Rock branch extending from Liberty, Calif., to Two Rock, 5.4 miles.

SOUTHERN PACIFIC. — *Substitution of Equipment.* — The Interstate Commerce Commission, Division 4, has modified its order of March 25 in Finance Docket No. 13658 so as to permit this road to substitute 12 oil-burning locomotives of the 4-8-8-2 type for some of the box cars originally proposed to be acquired through the $5,660,000 certificate issue. The decision states that War Production Board restrictions will preclude obtaining delivery on all of the box cars. It also reveals that the locomotives, to be built by the Baldwin Locomotive Works, would cost $250,000.57 each or a total of $3,000,006.84; and that WPB "has authorized the necessary priorities for the materials entering into the construction of the locomotives."

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS. *Improvements in St. Louis, Mo. and East St. Louis, Ill.* The City of East St. Louis, Ill., has asked the Interstate Commerce Commission to reaffirm its finding in Finance Docket No. 8519 to the effect that the present and future convenience and necessity require this company to (a) operate over the Douglas MacArthur Bridge owned by St. Louis and all approaches as now constructed and (b) to construct a union station in East St. Louis with tracks leading to and from the station and to and from the tracks of any railroad using the facilities thereof and connections with the present facilities and with tracks leading to and from the eastern approaches to the Douglas MacArthur Bridge.

At the same time the City of St. Louis, Mo., has asked the commission in the same proceeding to require the Terminal Railroad Association to remove certain elevated tracks and structures and to substitute therefor double tracks in order that the City may complete the construction of the Jefferson National Expansion Memorial. Both cities contend that the Terminal Railroad agreed to make these changes and was granted authority to do so by them and the Interstate Commerce Commission in 1930, but to date has refused to make the improvements.

UTICA, CLINTON & BINGHAMTON.—*Dissolution Sought.*—Approval for the dissolution of this railroad has been sought from the New York State Public Service Commission. The action involves payment of $206,820 by the New York State Railway-Utica lines and the Delaware & Hudson to the Utica, Clinton & Binghamton for certain properties and franchises, which amount would be used to pay off mortgages on the property, with the remaining going to the stockholders.

WABASH.—*Interest on Income Bonds and Dividends on Preferred Stock.*—The Interstate Commerce Commission has dismissed for want of jurisdiction a petition which sought an order directing the reorganization managers of this road to make prompt payment of interest on income bonds and dividends on preferred stock for the year ending December 31, 1941. The petitioner, Walter G. Peterkin, was the owner of prereorganization refunding and general mortgage bonds for which he has received or is entitled to receive income bonds and preferred stock as part payment therefor.

WESTERN MARYLAND. — *Abandonment.* — The Interstate Commerce Commission, Division 4, has authorized this road to abandon its 5.4-mile line from Thomas, W. Va., to Davis.

Average Prices of Stocks and Bonds

	July 14	Last week	Last year
Average price of 20 representative railway stocks..	26.36	25.87	30.37
Average price of 20 representative railway bonds ..	64.21	64.17	65.61

Railway Officers

EXECUTIVES

W. D. Howard, general superintendent of the Cape Fear railways, has been promoted to vice-president in charge of operations, with headquarters as before at Fort Bragg, N. C.

S. D. Hurst, Jr., assistant to general manager and assistant secretary of the Atlantic Coast Line, has been appointed assistant to executive vice-president, with headquarters as before at Wilmington, N. C.

FINANCIAL, LEGAL AND ACCOUNTING

R. J. Martineau has been appointed an attorney on the Atchison, Topeka & Santa Fe, with headquarters at Chicago.

J. Paul Litton has been appointed general auditor of the Cape Fear railways, with headquarters at Fort Bragg, N. C., succeeding **J. B. Coursey,** deceased.

John C. Shields, general solicitor of the Pere Marquette, with headquarters at Detroit, Mich., has been promoted to general counsel, succeeding **Seward L. Merriam,** who retired on July 1.

OPERATING

W. J. Leib, trainmaster on the Chicago, Milwaukee, St. Paul & Pacific at Austin, Minn., has been promoted to assistant superintendent, with the same headquarters.

J. N. Petrie has been appointed system telegraph and telephone engineer of the Union Pacific, with headquarters at Omaha, Neb.

B. L. Lindley, transportation inspector of the Plains and Panhandle divisions of the Atchison, Topeka & Santa Fe, has been promoted to trainmaster at Gallup, N. M.

O. Q. Johnson has been appointed trainmaster on the Oklahoma division of the Chicago, Rock Island & Pacific at El Reno, Okla., succeeding **J. W. Detrick,** who has been transferred to Herington, Kan.

A. L. Ledin, assistant superintendent of the Duluth, Missabe & Iron Range, has been promoted to superintendent, with headquarters as before at Duluth, Minn., succeeding **C. J. Birch.**

Thomas Butler, chief clerk to the chief operating officer of the Chicago & North Western, has been promoted to assistant to the chief operating officer, a newly created position, with headquarters at Chicago.

E. H. Showalter, assistant division superintendent on the Northern Pacific at Fargo, N. D., has been appointed superintendent of the Spokane, Portland & Seattle, with headquarters at Portland, Ore., succeeding **C. P. Pearce.**

J. J. Callahan, trainmaster and road foreman of engines of the Chesapeake & Ohio at Huntington, W. Va., has been appointed trainmaster, with the same headquarters, succeeding **W. S. Perry. H. E. Bess,** road foreman of engines at Huntington, has been appointed trainmaster and road foreman of engines, with the same headquarters, succeeding Mr. Callahan.

J. A. McLees has been appointed assistant superintendent of the South Carolina division of the Seaboard Air Line, with headquarters at Savannah, Ga., succeeding **J. W. Sexton,** who has accepted service elsewhere. **L. F. Branan** has been appointed assistant superintendent of the North Florida division at Tallahassee, Fla. **R. M. Stone** has been appointed assistant superintendent of the Virginia division at Raleigh, N. C.

J. D. Fuchs has been appointed trainmaster on the Chicago Terminal division of the Pennsylvania, succeeding **Berkeley Ward, Jr.,** whose promotion to superintendent of the Indianapolis division was reported in the *Railway Age* of July 11. **J. W. Fike,** trainmaster on the Indianapolis division, has been transferred to the St. Louis division and **C. W. Jeffries,** assistant trainmaster at Cincinnati, has been advanced to trainmaster of the Indianapolis division, replacing Mr. Fike.

Edward C. Gegenheimer, whose promotion to general superintendent of the Central Pennsylvania division of the Pennsylvania at Williamsport, Pa., was reported in the *Railway Age* of July 4, was born at Chicago on August 28, 1893. He received his education at the Armour and Lewis Institutes in Chicago. On November 13, 1911, Mr. Gegenheimer entered the service of the Pennsylvania as assistant on the engineer corps, subsequently engaging in the construction of the Chicago Union

Edward C. Gegenheimer

station, and later becoming assistant general yardmaster and assistant engineer in the chief engineer's office at Chicago. He was appointed assistant trainmaster of the Columbus division on May 1, 1927, being transferred to the Toledo division on October 16, 1927. Mr. Gegenheimer was promoted to trainmaster of the Philadelphia Terminal division on August 16, 1928, and was transferred to the Akron division on January 5, 1931. On June 1, 1931, he was promoted to superintendent of the Sunbury division, being transferred to the Toledo division on July 1, 1933; to the Williamsport division on November 1, 1934; to the Middle division on May 1, 1936; and to the Philadelphia Terminal division on February 16, 1942, where he remained until his recent appointment as general superintendent of the Central Pennsylvania division at Williamsport.

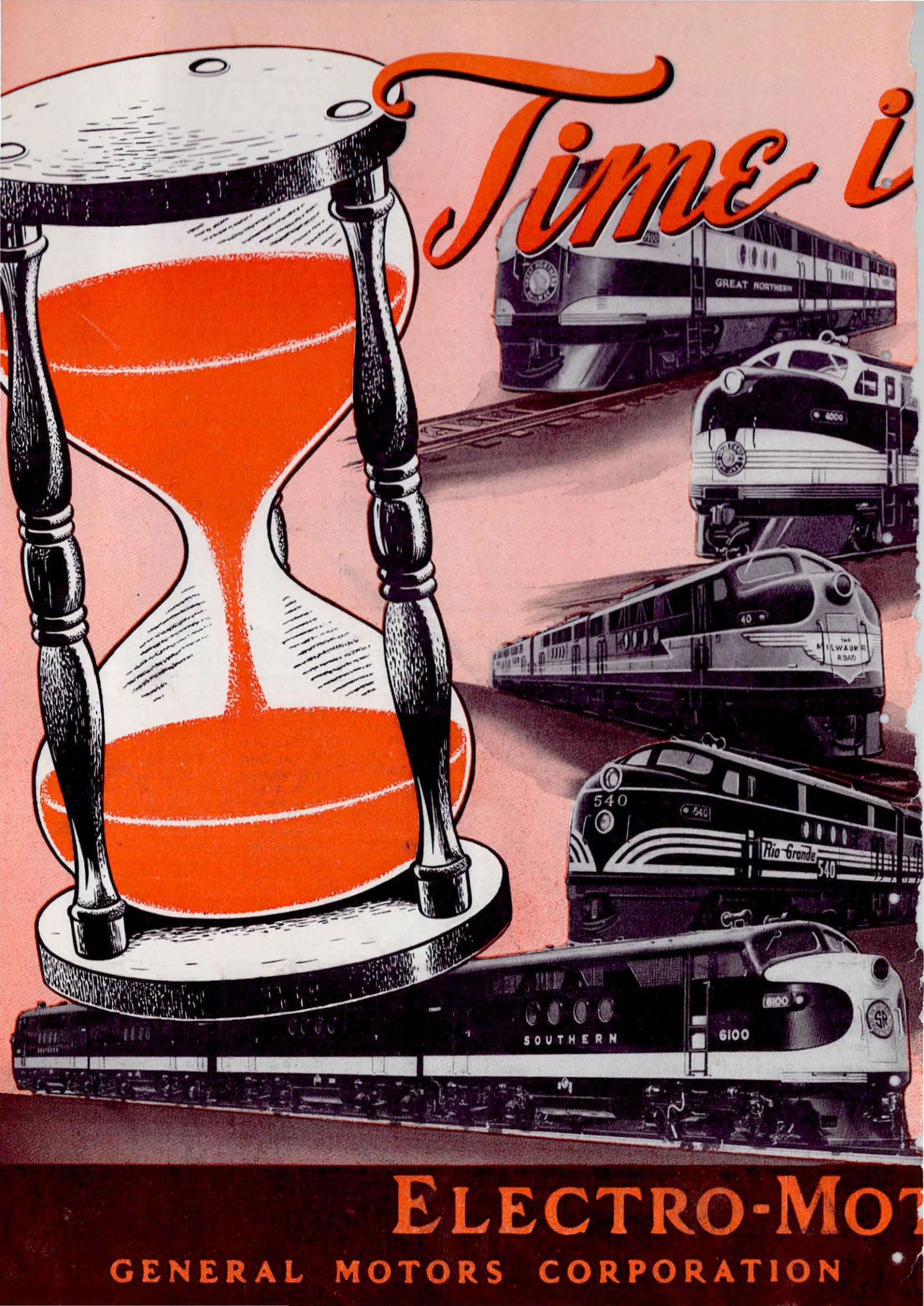
William H. Hillis, assistant chief operating officer in charge of engineering and maintenance of way on the Chicago, Rock Island & Pacific, with headquarters at Chicago, has been promoted to operating officer, with the same headquarters, succeeding to the duties of **John D. Farrington,** former chief operating officer, whose promotion to chief executive officer was reported in the *Railway Age* of July 11. **G. W. Raney,** general superintendent at Des

W. H. Hillis

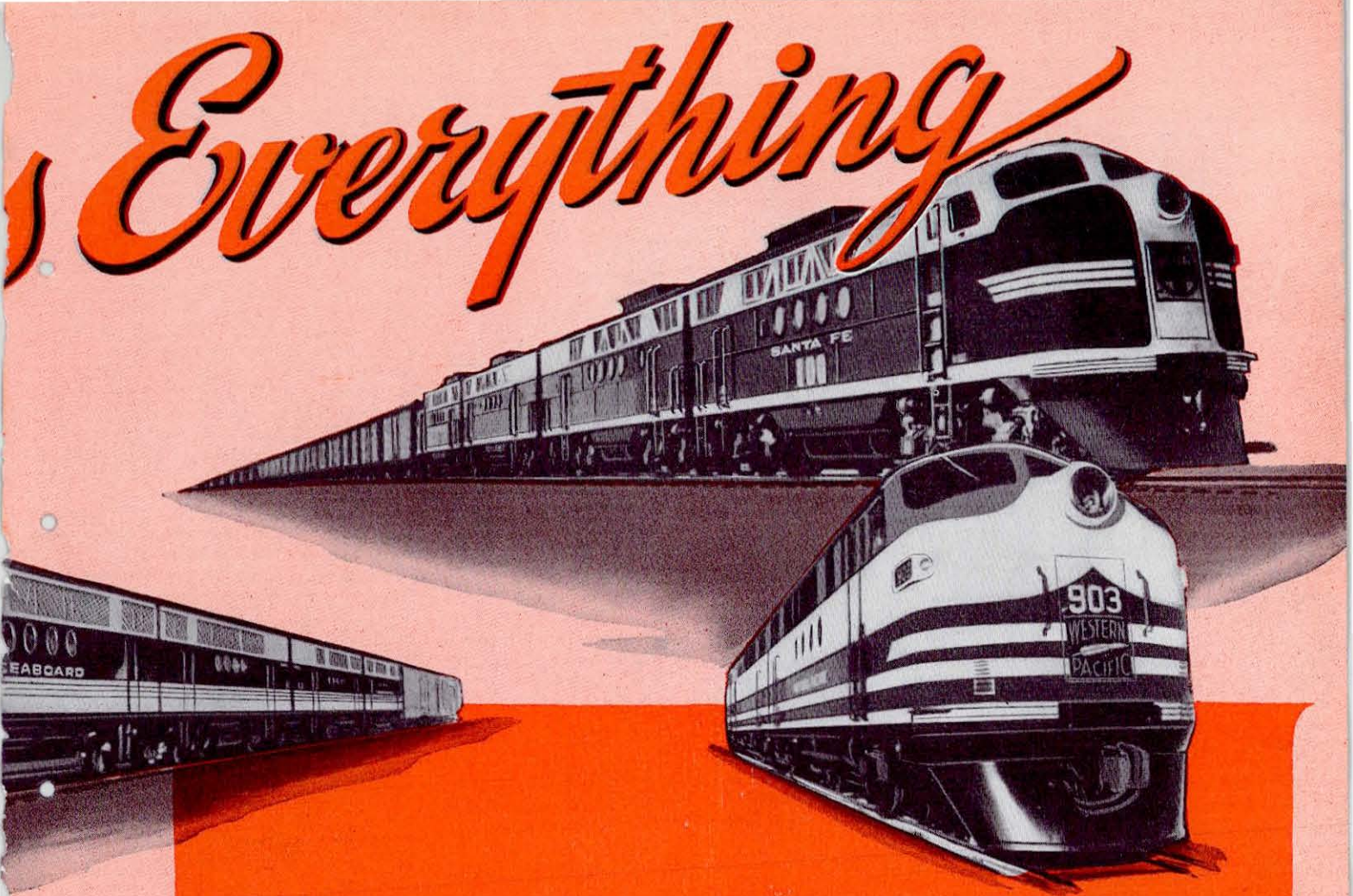
Moines, Iowa, has been advanced to general manager, with headquarters at Chicago, a position which has been vacant since the retirement of **Claude J. Brown** on May 1, 1941. **Charles L. Franklin,** assistant to the chief operating officer at Chicago, has been advanced to general superintendent, with headquarters at Kansas City, Mo., relieving **O. W. Limestall,** who has been transferred to Des Moines, replacing Mr. Raney. A photograph and biography of Mr. Franklin were published on page 1225 of the *Railway Age* of June 20, following his promotion a few weeks ago to assistant to the chief operating officer.

Mr. Hillis was born at Colona, Ill., on March 31, 1886, and entered railway service on January 1, 1906, as a rodman on the Chicago, Burlington & Quincy at Beardstown, Ill. He later served in various capacities in the engineering department of that railway until August 15, 1911, when he was appointed a roadmaster, and during the following five years, served in that position on various divisions, then being transferred to the operating department as trainmaster on the Aurora division. In 1925, Mr. Hillis was appointed district engineer of maintenance of the Illinos district, with headquarters at Galesburg, Ill.,

News continued on next left-hand page


Time i
GREAT NORTHERN
4000
THE MILWAUKEE ROAD
40
540
Rio Grande 540
SOUTHERN
6100
ELECTRO-MO
GENERAL MOTORS CORPORATION

Everything



TIME is priceless. Fighting men cannot wait. Every minute — every hour — every day counts. One battleship this year is worth two in 1943. A thousand planes in 1942 are worth ten thousand in 1943.

In this battle ot production, the railroads are faced with their biggest job in history — that of speeding America's enormous and ever increasing tonnage of materials, supplies and equipment, requiring the service of every available piece of rolling stock, especially locomotives.

In meeting this challenge, General Motors Diesel Road Locomotives are making possible many operating advantages which are vital to America at war, such as: — reduction in train miles as much as 50 per cent — faster schedules with fewer service delays — increased tonnage hauling capacity — and for each Diesel operated will release as many as five steam locomotives for other important services. And as more Diesels go into service, America's transportation network becomes that much stronger.

WHO SERVES THE RAILROADS — SERVES AMERICA

GENERAL MOTORS
LOCOMOTIVES

IVE DIVISION

LA GRANGE, ILLINOIS, U. S. A.

and in October, 1927, he was advanced to assistant superintendent of the LaCrosse division. Three years later, he was transferred to the Galesburg division, and on December 15, 1931, he was sent to Texas, where, as superintendent of construction, he had charge of the construction of a 110-mile line between Childress, Tex., and Pampa. Following the completion of this work, he returned to the LaCrosse division as assistant superintendent. In July, 1936, Mr. Hillis went with the Rock Island as engineer maintenance of way, and in October, 1939, he was promoted to assistant chief operating officer.

Willis Herbert Wallace, whose retirement as superintendent of the Toledo-Ludington division of the Pere Marquette, with headquarters at Saginaw, Mich., was reported in the *Railway Age* of May 30, was born at Farmington, Ont., on September 9, 1871, and entered railway service in 1887 as a boiler shop apprentice on the West Shore (now part of the New York Central) at Buffalo, N. Y., later serving in the same capacity on the New York Central at Buffalo and the Chicago, Milwaukee, St. Paul & Pacific at Green Bay, Wis. In 1891 he became a locomotive fireman on the Chicago, St. Paul, Minneapolis & Omaha (now part of the Chicago & North Western system) at St. Paul, Minn., later being promoted to engineer. From 1909 to 1912 he served as road foreman of engines on the Cincinnati, Hamilton & Dayton (now part of the Baltimore & Ohio) and on the Baltimore & Ohio at Hamilton, Ohio. In 1912 Mr. Wallace went with the Pere Marquette as road foreman at Saginaw, later being advanced to trainmaster at that point, and two years later he became general mechanical inspector on the Missouri-Kansas-Texas at Dennison, Tex. He returned to the Pere Marquette in 1917 as trainmaster at Grand Rapids, Mich., and in 1920, he was promoted to superintendent of the Port Huron-Grand Rapids division, with headquarters at Saginaw. In 1924 Mr. Wallace was transferred to the Toledo-Ludington division, with the same headquarters, which position he held until his retirement, effective June 1.

TRAFFIC

I. L. Wade, Jr., district freight and passenger agent for the Wabash at Atlanta, Ga., has been appointed general agent at that point, a change of title.

W. A. Shackelford, general agent, passenger department, for the Canadian Pacific at Atlanta, Ga., has been transferred to Cincinnati, Ohio.

G. D. Brophy, city passenger agent of the Canadian Pacific, with headquarters at Winnipeg, Man., has been appointed assistant general agent, with headquarters at Montreal, Que.

W. Dean Galloway, commercial agent of the Southern at Mobile, Ala., has been appointed district freight agent, with headquarters at Macon, Ga., succeeding **V. T. Ivie,** whose promotion to assistant general freight agent at Atlanta, Ga., was reported in the *Railway Age* of July 11.

Henry S. Head, foreign freight agent of the Grand Trunk-Canadian National at New York since July 1, 1920, has been retired on pension under terms of the United States Railroad Retirement Act.

C. A. Pfister, chief of the tariff and divisions bureau of the Chicago, Indianapolis & Louisville (Monon), has been promoted to assistant general freight agent, with headquarters as before at Chicago.

Clyde Slocum, commercial agent for the Lehigh Valley at Kansas City, Mo., has been promoted to general agent at that point, succeeding **Frank H. Briggs,** who retired on July 1.

E. H. Martin, district passenger and freight agent on the Missouri Pacific at Colorado Springs, Colo., has been appointed general agent at that point, a change title.

Robert M. Martin, commercial agent of the Central of Georgia, with headquarters at Chicago, has been promoted to Northwestern traffic agent, with the same headquarters, to succeed **Daniel W. Vaughan,** who retired on June 30.

Lloyd L. Thoms, freight traffic representative for the Chicago, Rock Island & Pacific at San Francisco, Cal., has been promoted to general agent at Cleveland, Ohio, succeeding **G. W. Teare,** who has retired.

V. A. Roane, general freight and passenger agent of the Ashley, Drew & Northern, has been appointed traffic manager, with headquarters as before at Crossett, Ark., succeeding **G. F. Thomas,** who has retired.

Joseph S. Sikora, general freight agent of the Delaware, Lackawanna & Western, has been promoted to freight traffic manager, with headquarters as before at New York, succeeding **W. J. Daily,** whose death on July 2 was reported in the *Railway Age* of July 11. **E. M. Sellers,** assistant general freight agent, at New York, has been promoted to general freight agent, succeeding Mr. Sikora. **William J. Stumpf,** assistant to general freight agent, has been promoted to assistant general freight agent, succeeding Mr. Sellers. **Martin A. Ehlers,** chief of the tariff bureau, has been promoted to assistant to general freight agent, succeeding Mr. Stumpf.

Joseph S. Sikora

Mr. Sikora was born at Fall River, Mass., and entered the service of the Lackawanna in July, 1912, as a bill clerk, later serving as rate clerk and chief rate clerk. In 1920 he became a rate clerk in the office of the general eastern freight agent. From February, 1922, to February, 1929, he was assistant chief rate clerk in the general freight office at New York. Advancing to chief rate clerk, he served in that capacity until May, 1931, when he was promoted to assistant general freight agent. Mr. Sikora was promoted to general freight agent in May, 1935.

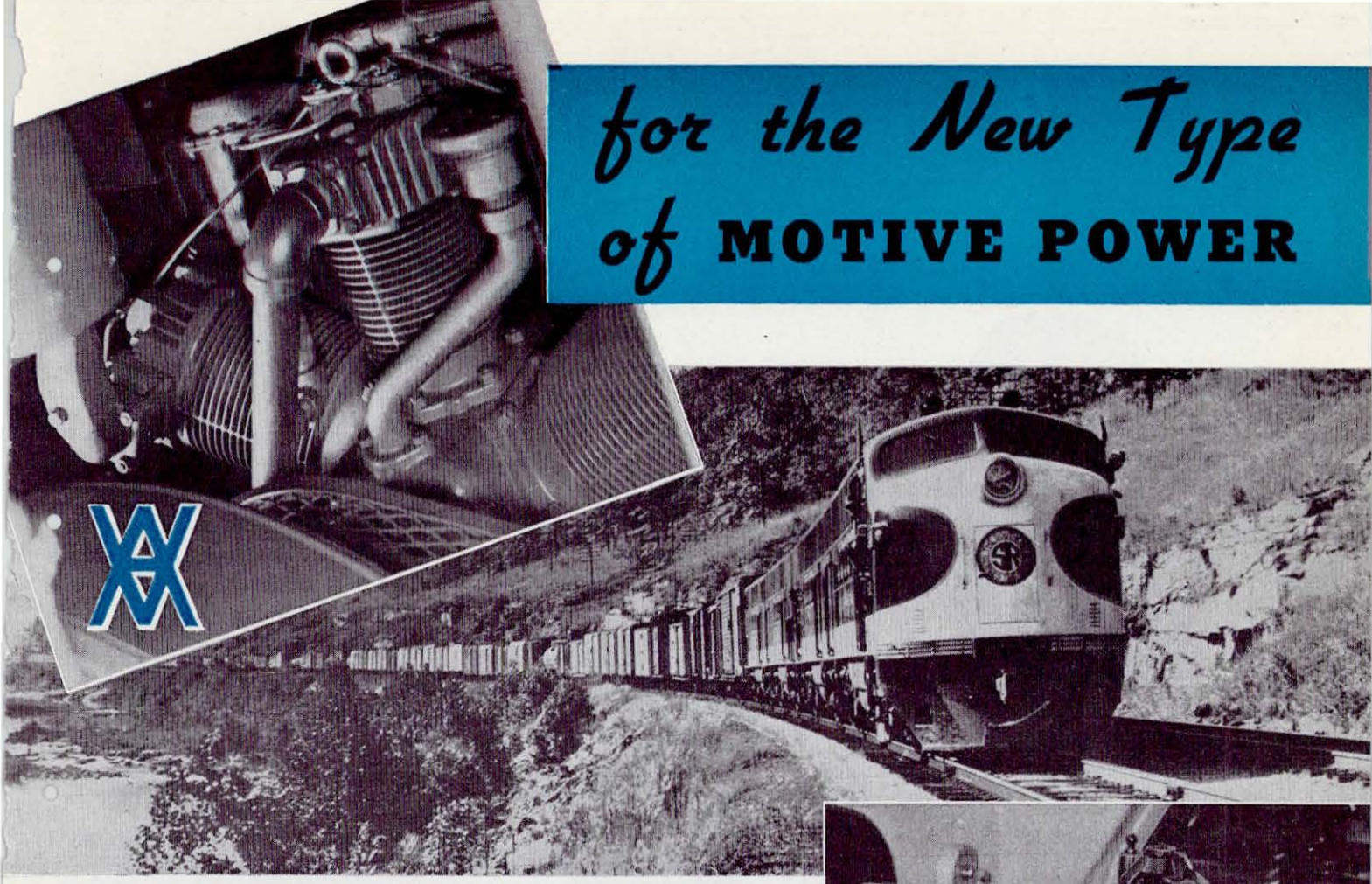
Fred E. Watson, general passenger agent for the Central district of the Southern Pacific, with headquarters at San Francisco, Cal., has been appointed also general passenger agent of the Northwestern Pacific.

Rommie B. Smith, commercial agent on the Illinois Central at Peoria, Ill., has been promoted to assistant coal traffic manager, a newly created position, with headquarters at Chicago. Mr. Smith was born in Kentucky and entered railway service in 1915 as an agent-operator on the Indiana division of the Illinois Central, later leaving to enter military service. At the close of World War I, he returned to the Illinois Central as agent at Palestine, Ill., and later served in a similar capacity at Bloomington, Ind. He was appointed commercial agent at Cairo, Ill., in 1925 and subsequently served at Carbondale, Ill., Bloomington, St. Louis, Mo., and Peoria as traffic and commercial agent.

Rommie B. Smith

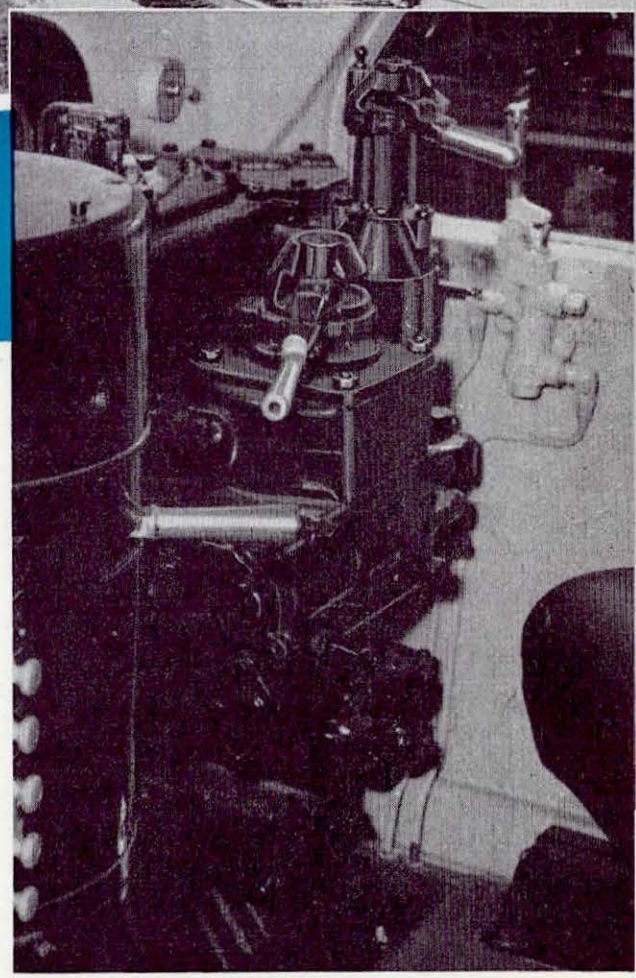
Joseph A. Russell, manager of perishable and dairy traffic of the Erie, with headquarters at New York, has been promoted to western freight traffic manager, a newly created position, with headquarters at Chicago. **John G. Hill,** assistant freight traffic manager, with headquarters at Chicago, has been advanced to freight traffic manager, with the same headquarters, succeeding **David R. Thompson,** whose promotion to assistant vice-president, with headquarters at Cleveland, Ohio, was reported in the *Railway Age* of July 11. A photograph and biography of Mr. Hill were published on page 151 of the *Railway*

News continued on next left-hand page



for the New Type of MOTIVE POWER

. . . . *Traditional* BRAKE EFFICIENCY



DURING every advanced era of railroading, Air Brakes of appropriate type have been a distinctive asset to transportation facilities . . . When Diesel-electric locomotives came into vogue for main line freight hauling, there was a suitable brake equipment ready and waiting — an adaptation of that used so successfully on modern steam motive power. The No. 8-EL equipment has already demonstrated its merits on scores of locomotives. Easy and convenient manipulation, adequate and flexible control, reliability of performance, are the outstanding characteristics. It permits unusually smooth handling of trains, and contributes to time-saving operation. Air for brake operations is supplied by the 3-CD Compressor developed for this particular service. It is of ample capacity, and embodies unique design features that assure efficient, enduring performance.

WESTINGHOUSE AIR BRAKE COMPANY

WILMERDING, PENNSYLVANIA

Age of January 3, 1942, following his promotion to assistant freight traffic manager at Chicago.

Mr. Russell was born at Walla Walla, Wash., on July 3, 1899, and entered railway service on August 9, 1919, in station work on the Northern Pacific at Yakima, Wash. In June, 1925, he went with the

Joseph A. Russell

Chicago, St. Paul, Minneapolis & Omaha (part of the Chicago & North Western system) as traveling freight agent at Seattle, Wash., and on September 12, 1927, he went with the Erie as commercial agent at Seattle. Mr. Russell was promoted to general agent at Portland, Ore., on January 1, 1930, and was transferred to Los Angeles, Cal., on September 1, 1939. On March 1, 1941, he was advanced to manager of perishable and dairy traffic at New York which position he held until his recent promotion, effective July 10.

ENGINEERING & SIGNALING

The jurisdiction of **C. F. Grundy,** signal engineer of the Kansas City Southern, with headquarters at Kansas City, Mo., has been extended over the Louisiana & Arkansas.

R. C. Charlton, signal engineer of the Northwestern district of the Union Pacific, with headquarters at Portland, Ore., has been appointed signal supervisor, with the same headquarters.

Frank W. Thompson, engineer officer of the Chicago, Rock Island & Pacific, has been promoted to chief engineer, with headquarters as before at Chicago, a position that has been vacant since the retirement of the late **Robert H. Ford** on September 30, 1939.

E. L. McDonald, division engineer on the Atchison, Topeka & Santa Fe at Winslow, Ariz., has been transferred to Needles, Cal., succeeding **R. E. Chambers,** who has been transferred to San Bernardino, Cal., as reported in the *Railway Age* of July 11. **W. B. Darling,** assistant division engineer at Winslow, has been appointed acting division engineer at that point, replacing Mr. McDonald.

Charles W. Baldridge, whose retirement as assistant engineer in charge of rail and track fastenings on the staff of the chief engineer of the Atchison, Topeka & Santa Fe at Chicago, was reported in the *Railway Age* of July 11, was born in Woodford county, Ill., on April 18, 1869, and attended Baker University for 2½ years and the University of Kansas for three years, studying electrical and civil engineering. He entered railway service in 1893, serving about six months as a chainman for the Galveston, La Porte & Houston (now part of the Southern Pacific Lines in Texas and Louisiana) and in 1895 returned to railroad service as a levelman on the Kansas City, Watkins & Gulf (now part of the Missouri Pacific), serving on this road for about a year. In August, 1897, Mr. Baldridge went with the Santa Fe as a chainman at Carrollton, Mo., and a month later, he was promoted to rodman at Ft. Madison, Iowa. In January, 1899, he was appointed a masonry inspector at Pueblo, Colo., and in March, 1899, he went with the Chicago, Burlington & Quincy as an assistant engineer on construction. He then served a year as an assistant engineer on maintenance on the Kansas City, Ft. Scott & Memphis (now part of the St. Louis-San Francisco) and

Charles W. Baldridge

in 1901 he went with the Chicago & North Western in the same capacity. In 1903 he was appointed roadmaster and served in that capacity at various points in Iowa and South Dakota. Mr. Baldridge then served for a year as superintendent of construction of the Saratoga & Encampment in Wyoming (now operated by the Union Pacific) and in 1911 he went with the Chicago, Rock Island & Pacific as roadmaster at Eldon, Iowa, later being transferred to Washington, Iowa. In May, 1912, he returned to the Santa Fe as an assistant engineer, with headquarters at Topeka, and in November, 1913, he was promoted to assistant engineer, system, with headquarters at Chicago, where he remained until his retirement. Mr. Baldridge has been an active member of the American Railway Engineering Association and was chairman of the Committee on Roadway from March, 1927, to March, 1933. He was president of the Roadmaster's and Maintenance of Way Association of America in 1934-1935.

SPECIAL

Earle B. Perry, assistant to general manager of the New York, New Haven & Hartford, with headquarters at New Haven, Conn., has been appointed manager of personnel.

MECHANICAL

Raymond C. Cross, assistant superintendent of equipment on the New York

Raymond C. Cross

Central with headquarters at Cleveland, Ohio, has been promoted to superintendent of equipment, with the same headquarters, succeeding **A. D. Bingman,** who has been transferred to New York, as reported in the *Railway Age* of July 4. **A. L. Wright,** assistant to the general superintendent of motive power at New York, has been appointed assistant superintendent of equipment at Cleveland, replacing Mr. Cross.

Mr. Cross was born in Cleveland, Ohio, on November 7, 1886, and entered the service of the New York Central as a machinist apprentice at the Collinwood (Ohio) locomotive shop on July 1, 1901. In June, 1911, he was promoted to gang foreman at the Collinwood enginehouse and in November, 1911, he resigned to go with the Chicago, Great Western as a roundhouse foreman. Four years later he returned to the New York Central and served at various points as terminal foreman until April, 1930, when he was promoted to assistant master mechanic. He was advanced to master mechanic at Collinwood in March, 1934, and on April 1, 1939, he was promoted to assistant superintendent of equipment at Cleveland.

G. J. Flanagan has been appointed general car inspector of the New York Central system, with headquarters at New York.

L. H. Oaks, assistant road foreman of engines on the Ft. Wayne division of the Pennsylvania, has been promoted to general air brake inspector of the Western region, with headquarters at Chicago.

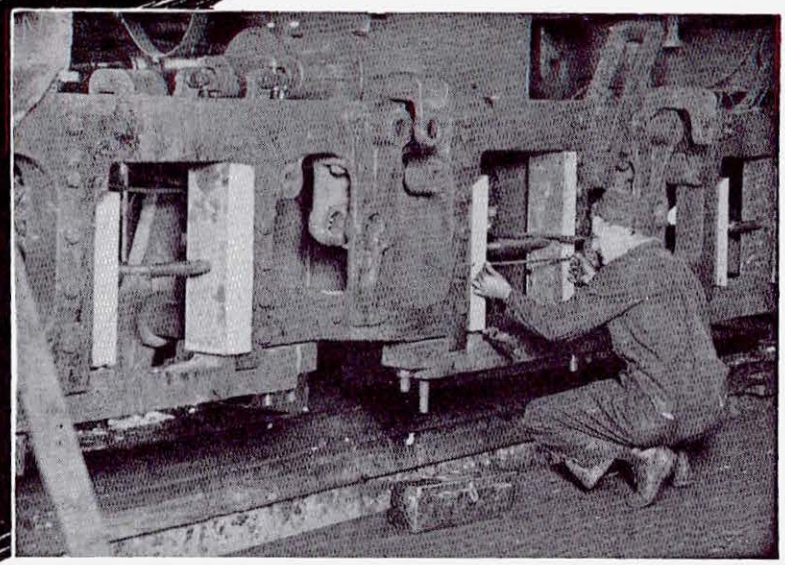
Charles A. Jordan, general car inspector of the New York, Chicago & St. Louis (Nickel Plate) has been promoted to the newly created position of assistant to the superintendent of the car department, with headquarters as before at Cleveland, Ohio.

PURCHASES AND STORES

George L. Mitchell, assistant to executive vice-president and assistant secretary of the Atlantic Coast Line, has been ap-

News continued on next left-hand page

Prevent Destructive Pounds



ELIMINATE MANY REPAIR JOBS

EVERY driving box knock is a boost for higher maintenance. The knocks quickly develop into the disastrous pounds which shorten the service life of many locomotive parts.

Shoes and Wedges made from HUNT-SPILLER *Air Furnace* GUN IRON are helping many railroads to prevent driving box pounds.

Their unusual resistance to frictional wear is proven by the fact that locomotives equipped require less frequent wedge adjustments.

Maintenance records show that rods, axles, rod bearings and even frames give less trouble and last longer on locomotives equipped with H S G I Shoes and Wedges.

HUNT-SPILLER MFG. CORPORATION

V. W. Ellet, *President* — E. J. Fuller, *Vice-Pres. & Gen. Mgr.*

383 Dorchester Ave. *Office & Works* South Boston, Mass.

Canadian Representative: Joseph Robb & Co., Ltd., 5575 Cote St. Paul Rd., Montreal, P. Q.
Export Agent for Latin America:
International Rwy. Supply Co., 30 Church Street, New York, N. Y.

H S G I
Reg. U.S. Trade Mark
Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings
Crosshead Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings
Finished Parts
Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings All Shapes
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

HUNT-SPILLER GUN IRON

Air Furnace

pointed assistant purchasing agent of that road and the Charleston & Western Carolina, with headquarters as before at Wilmington, N. C.

W. C. Wilson, division storekeeper on the Pere Marquette at Saginaw, Mich., has been promoted to assistant general storekeeper with headquarters at Grand Rapids, Mich., and **Henry C. Zoerman,** requisition clerk, has been advanced to division storekeeper at Saginaw, succeeding Mr. Wilson.

Franklin J. Steinberger, whose promotion to assistant to the general purchasing agent of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was reported in the *Railway Age* of June 20, was born in Dawson, Yukon territory, Canada, on September 24, 1898, and entered service on the Santa Fe in 1920 as a laborer in the store department at San Bernardino, Cal. In progression he held every position in the store department, being promoted to storekeeper at Seligman, Ariz., in 1924. In 1928 he was appointed traveling storekeeper at San Bernardino, and in October, 1939, he was appointed division storekeeper at Albuquerque, N. M. Mr. Steinberger was advanced to assistant general storekeeper at Topeka, Kan., on October 1, 1940, which position he held until his recent promotion.

OBITUARY

Jack B. Coursey, general auditor of the Cape Fear railways, with headquarters at Fort Bragg, N. C., died suddenly on June 21 at the age of 32.

F. J. Kahle, division superintendent on the Baltimore & Ohio, with headquarters at Indianapolis, Ind., died on July 14 at Decatur, Ill.

Collie Edwin Carlton, who retired on March 1 as assistant freight traffic manager for the Missouri Pacific Lines at New York, died on July 14 at his home in Sea Girt, N. J., at the age of 60. A photograph of Mr. Carlton and a biographical sketch of his railway career were published in the *Railway Age* of March 14 in connection with his retirement.

Lansing Roberts Robinson, who was general New England freight agent of the Canadian Pacific from 1908 to 1934, died on June 23 at San Diego, Cal., at the age of 79. Mr. Robinson spent over 50 years in the transportation business, including railroads, deepwater shipping, and Great Lakes. From 1934 until his death Mr. Robinson lived in San Diego, devoting his time to free lance writing for various newspapers and other publications.

C. Curtice McCain, retired transportation expert, who was the first auditor of the Interstate Commerce Commission, died at his home in East Orange, N. J., on July 14, at the age of 86. Mr. McCain was chairman of the Trunk Line Association from 1907 to 1918, when he became secretary, Eastern Freight Traffic Committee, United States Railroad Administration. On April 1, 1919, he was appointed manager of the Eastern Freight Inspection Bureau. He was a member of the Official Classification Committee from 1920 until his retirement because of ill health in 1934.

Charles E. Simmons, president and chairman of the board of the New York, Ontario & Western, with headquarters at New York, died on July 14 at his home in Mount Vernon, N. Y., after an illness of two months, at the age of 66. Mr. Simmons was born on May 12, 1876, and entered the service of the New York, Ontario & Western on May 11, 1905, in the president's office. He was appointed secretary of that road late in 1929 and in October, 1937, he became vice-president and secretary, which positions he held until his election as president and chairman of the board in April, 1941. Mr. Simmons had also been secretary of the New York, Susquehanna & Western since March, 1940.

William J. Leahy, who retired on July 1, 1939, as passenger traffic manager of the Chicago, Rock Island & Pacific, with headquarters at Chicago, died in St. George's hospital in that city on July 11 after an extended illness. Mr. Leahy was born on July 25, 1867, at Elmira, N. Y., and entered railway service in 1883 as a clerk in the auditor's office of the Buffalo, New York & Philadelphia (now part of the

William J. Leahy

Pennsylvania) at Buffalo, N. Y. In the following year he went with the West Shore (now part of the New York Central) where he served in various positions in the passenger department until 1887, when he entered the service of the Rock Island as traveling passenger agent. Four years later he was made passenger agent at Philadelphia, Pa., and in 1899 he was appointed general eastern passenger agent at New York. In 1901, Mr. Leahy was promoted to assistant general passenger agent, with headquarters at St. Louis, Mo., being advanced in 1905 to first assistant general passenger agent, with headquarters at Chicago. In 1909 he was further advanced to general passenger agent and later he was made assistant passenger traffic manager. He was promoted to passenger traffic manager on June 1, 1930, which position he held until his retirement.

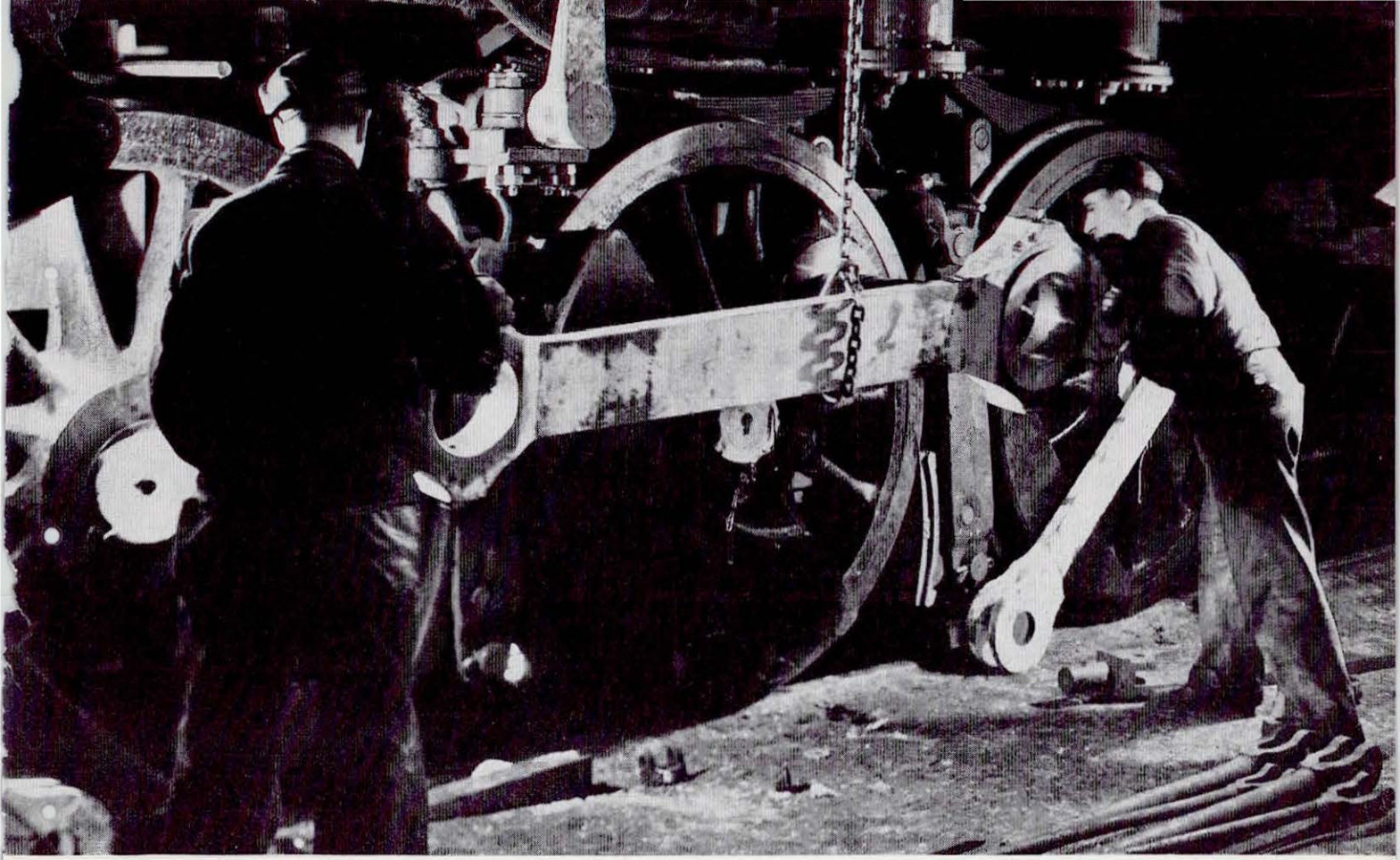
Charles Edward Walsh, assistant to vice-president in charge of real estate, purchases and insurance of the Pennsylvania, with headquarters at Philadelphia, Pa., died on July 12 in University hospital, after a long illness, at the age of 59. Mr. Walsh was born at Uhrichsville, Ohio, on September 20, 1882, and entered railroad service on May 6, 1899, as storeroom clerk on the Pittsburgh, Cincinnati, Chicago & St. Louis (now P. R. R.). From November, 1901, to November, 1906, he served in various clerical capacities in the office of

Charles Edward Walsh

the purchasing agent of the Pennsylvania lines West, with headquarters at Pittsburgh, Pa. In November, 1906, he became assistant chief clerk and in January, 1913, chief clerk, in the same office. Mr. Walsh was appointed assistant purchasing agent at Pittsburgh in June, 1914, and from February, 1918, to March, 1919, he was in charge of the purchasing department, Pennsylvania lines West of Pittsburgh, during absence of the purchasing agent. In March, 1920, he became assistant purchasing agent of the Central region at Pittsburgh, transferring to Philadelphia in January, 1924. He was promoted to purchasing agent of P. R. R. and Long Island in January, 1927, becoming general purchasing agent at Philadelphia in April, 1934, which position he held until last February, when he became assistant to the vice-president in charge of real estate, purchases and insurance.

Walter E. Hodges, who retired in 1930 as a vice-president of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., died at his home in Santa Barbara, Cal., on June 15. Mr. Hodges was born at Fall River, Mass., on July 23, 1860, and entered railway service in November, 1881, as a clerk in the office of the general superintendent of the Chicago, Burlington & Quincy at Chicago, later serving successively as chief clerk to the trainmaster, clerk to the general freight agent and assistant to the general manager at that point. In October, 1889, he became traffic manager of Fraser & Chalmers, Chicago. He returned to railway service in January, 1896, as private secretary to the president of the Santa Fe and in April, 1897, he was appointed general purchasing agent. Mr. Hodges was elected vice-president in charge of purchases and stores and timber and fuel properties in October, 1909, and ten years later, he was relieved of these duties but continued as a vice-president in charge of certain properties at Los Angeles. In 1920 Mr. Hodges moved to Santa Barbara, where he established his home.

Table of Freight Operating Statistics appears on next left-hand page



Lost Time for Shopping

WON'T HELP WIN THIS WAR!

● Planes, guns, tanks and ships are needed to win the war. So, too, is transportation—with its backbone composed of railroad systems.

Thus, every time a locomotive is shopped for repairs, time is lost and transportation suffers—our war effort lags.

But shopping time can be reduced—and length of operating time between shoppings extended—by the use of the best steels wherever stress, shock, wear and fatigue must be resisted.

Republic metallurgists and engineers are ready and qualified to tell you the best available steels to use for longest life in each type of application in every kind of service. They can aid you in revising specifications when changes are needed to conserve critical alloying elements. They know the working qualities of each analysis and how to forge, machine and heat treat it to produce best results.

Why not take the first step toward cutting shopping time and increasing the availability of equipment by putting your problems in Republic's hands?

REPUBLIC STEEL CORPORATION

Alloy Steel Division Sales Offices: Massillon, O. • General Offices: Cleveland, O.

Berger Manufacturing Division • Culvert Division
Niles Steel Products Division • Steel and Tubes Division
Union Drawn Steel Division • Truscon Steel Company
• • Export Department: Chrysler Building, New York, New York • •

REPUBLIC *Alloy* STEELS

REPUBLIC STEEL
PRODUCTION FOR VICTORY

Other products include Enduro Stainless Steel—Sheets—Plates—Pipe—Electrunite Boiler Tubes—Upson Bolts, Nuts and Rivets—Berger Lockers and Shelving—Truscon Building Products.

Freight Operating Statistics of Large Steam Railways—Selected Items

Region, road, and year		Miles of road operated	Train-miles	Locomotive-miles: Principal and helper	Locomotive-miles: Light	Car-miles: Loaded (*thousands*)	Car-miles: Per cent loaded	Ton-miles (*thousands*): Gross excluding locomotives and tenders	Ton-miles (*thousands*): Net revenue and non-revenue	Number of road locomotives on line: Serviceable: Not stored	Number of road locomotives on line: Serviceable: Stored	Number of road locomotives on line: Unserviceable	Number of road locomotives on line: Per cent unserviceable
New England Region:													
Boston & Albany	1942	362	211,640	244,904	37,949	5,463	58.6	370,161	146,179	65	..	17	20.7
	1941	362	150,855	157,617	11,425	3,462	64.9	198,526	69,813	60	..	28	31.8
Boston & Maine	1942	1,853	412,885	482,573	48,381	15,005	64.8	954,189	395,781	162	2	21	11.4
	1941	1,894	309,633	350,421	28,111	11,764	68.1	662,341	239,378	131	..	39	22.9
N. Y., New Hav. & Hartf.†	1942	1,821	530,435	690,115	62,627	19,866	65.9	1,221,476	506,371	219	..	38	14.9
	1941	1,829	410,757	512,401	35,330	14,865	66.3	816,684	291,003	202	1	50	22.6
Great Lakes Region:													
Delaware & Hudson	1942	849	378,946	488,527	50,141	14,074	61.2	1,025,540	504,372	160	13	44	20.3
	1941	849	231,521	268,820	32,050	8,908	64.2	554,928	239,849	122	51	73	29.7
Del., Lack. & Western	1942	982	363,675	421,368	62,144	14,957	67.5	967,813	439,558	130	30	36	18.4
	1941	983	357,495	408,245	55,685	14,053	69.4	804,867	314,115	143	2	68	31.9
Erie	1942	2,251	891,898	950,441	60,171	40,192	65.6	2,594,103	1,097,175	297	22	85	21.0
	1941	2,257	723,174	765,680	43,391	31,842	67.5	1,859,294	695,009	244	19	162	38.1
Grand Trunk Western	1942	1,026	244,093	251,639	2,013	7,903	61.7	510,256	196,580	59	5	20	23.8
	1941	1,023	288,954	290,591	2,114	8,735	62.7	531,963	181,733	74	..	20	21.3
Lehigh Valley	1942	1,251	453,528	499,520	80,032	18,634	63.1	1,284,338	596,737	128	3	54	29.2
	1941	1,252	350,047	379,265	58,816	14,193	68.3	858,090	360,067	135	2	46	25.1
New York Central	1942	10,494	3,609,138	3,938,489	256,312	132,694	59.3	9,476,269	4,210,828	1,186	27	196	13.9
	1941	10,522	2,755,072	2,861,869	154,857	93,193	61.4	**5,812,848**	**2,190,410**	934	141	322	23.0
N. Y., Chicago & St. Louis	1942	1,657	824,734	837,055	9,784	29,363	62.2	1,963,264	821,909	158	..	16	9.2
	1941	1,672	566,916	574,635	7,413	21,314	66.1	1,257,985	463,632	133	9	21	12.9
Pere Marquette	1942	2,021	405,585	414,687	7,659	11,725	62.6	795,141	343,314	138	..	25	15.3
	1941	2,068	387,795	403,071	9,810	11,149	63.7	680,792	247,937	125	..	30	19.4
Pittsburgh & Lake Erie	1942	232	106,701	110,103	58	4,580	63.6	393,139	229,710	49	2	7	12.1
	1941	233	68,994	71,730	....	2,273	60.6	177,827	92,515	34	14	15	23.8
Wabash	1942	2,381	712,592	733,420	15,855	24,384	65.3	1,565,228	646,425	158	34	51	21.0
	1941	2,397	603,307	618,234	12,204	20,197	67.3	1,180,808	430,647	146	8	108	41.2
Central Eastern Region:													
Baltimore & Ohio	1942	6,215	2,363,354	2,952,827	323,283	77,458	60.7	5,625,848	2,643,901	900	18	215	19.0
	1941	6,246	1,538,142	1,875,982	188,342	48,790	64.7	3,107,238	1,300,370	718	167	253	22.2
Central of New Jersey†	1942	661	261,715	302,968	63,313	8,507	58.2	632,572	308,080	114	13	20	13.6
	1941	680	181,950	207,108	40,770	5,726	62.3	367,876	167,074	86	6	55	37.4
Chicago & Eastern Illinois	1942	925	183,477	184,362	3,489	4,743	65.4	313,123	142,354	51	..	16	23.9
	1941	925	178,975	179,712	3,070	4,618	67.3	273,791	109,091	59	4	28	30.8
Elgin, Joliet & Eastern	1942	392	144,308	145,944	968	3,912	61.1	307,496	157,929	69	..	10	12.6
	1941	390	108,954	110,224	1,441	2,782	58.7	208,976	97,695	60	1	13	17.6
Long Island	1942	374	29,558	30,982	20,972	304	53.0	23,962	9,997	40	1	6	12.8
	1941	375	28,291	29,459	17,689	284	52.7	20,841	7,481	36	4	8	16.7
Pennsylvania System	1942	9,952	4,781,704	5,636,558	697,607	174,163	59.5	12,730,466	5,878,495	1,978	10	172	8.0
	1941	9,960	3,328,012	3,907,091	500,118	121,641	61.4	8,012,039	3,292,416	1,484	123	564	26.0
Reading	1942	1,428	618,134	687,051	85,291	19,167	59.4	1,537,967	811,070	276	14	42	12.7
	1941	1,430	417,177	459,169	54,708	12,273	60.8	824,988	374,212	227	22	107	30.1
Pocahontas Region:													
Chesapeake & Ohio	1942	3,050	1,069,983	1,138,468	52,452	49,005	56.0	4,197,626	2,322,736	413	9	72	14.6
	1941	3,043	565,668	588,636	16,969	19,141	60.7	1,246,172	578,814	310	141	64	12.4
Norfolk & Western	1942	2,146	791,641	840,747	53,028	36,058	57.6	3,133,238	1,706,150	296	8	31	9.3
	1941	2,169	451,646	465,474	21,615	16,234	67.8	1,034,775	457,219	246	69	32	9.2
Southern Region:													
Atlantic Coast Line	1942	4,983	1,016,443	1,037,316	13,957	26,094	61.7	1,667,718	667,215	332	..	28	7.8
	1941	5,071	795,263	811,049	11,777	17,692	58.4	1,118,148	393,054	301	2	39	11.4
Central of Georgia†	1942	1,783	304,419	306,523	4,651	6,939	70.2	428,965	185,503	105	..	15	12.5
	1941	1,831	289,107	292,550	4,460	6,864	73.8	381,752	154,803	93	..	26	21.8
Gulf, Mobile & Ohio	1942	1,959	318,047	387,601	5,620	10,994	69.6	683,801	309,739	101	..	13	11.4
	1941	1,963	255,773	299,358	3,609	8,571	71.2	501,195	212,669	94	4	13	11.7
Illinois Central (incl. Y. & M. V.)	1942	6,500	1,817,399	1,824,831	32,924	61,719	59.8	4,372,801	1,943,166	612	10	86	12.1
	1941	6,521	1,368,250	1,374,523	24,697	40,217	63.5	2,561,725	1,059,069	536	4	176	24.6
Louisville & Nashville	1942	4,789	1,581,426	1,718,261	45,932	40,021	61.3	2,933,863	1,450,575	424	3	48	10.1
	1941	4,856	1,058,635	1,118,471	23,371	23,210	62.2	1,504,872	641,512	303	94	57	12.6
Seaboard Air Line*	1942	4,293	937,077	994,231	8,047	24,202	65.5	1,573,473	668,334	272	..	35	11.4
	1941	4,298	693,531	716,355	4,674	17,345	63.1	1,051,830	385,646	248	1	57	18.6
Southern	1942	6,469	2,023,994	2,064,355	31,100	45,133	65.6	2,858,735	1,256,843	584	..	90	13.4
	1941	6,521	1,437,437	1,461,914	20,234	35,558	69.7	1,960,255	772,574	519	1	127	19.6
Northwestern Region:													
Chicago & North Western†	1942	8,262	965,740	998,826	21,224	30,149	65.3	2,005,556	829,098	340	47	155	28.6
	1941	8,316	864,134	894,712	16,271	26,865	62.8	1,664,308	631,328	314	35	242	40.9
Chicago Great Western	1942	1,447	270,524	275,295	5,510	8,161	64.7	526,855	209,510	68	..	16	19.0
	1941	1,447	255,659	257,031	7,259	7,821	62.6	486,424	173,086	70	..	16	18.6
Chi., Milw., St. P. & Pac.†	1942	10,813	1,415,985	1,477,420	60,869	44,768	64.6	3,005,097	1,345,101	471	63	94	15.0
	1941	10,847	1,241,225	1,289,397	44,257	38,494	64.7	2,398,402	969,888	446	48	123	19.9
Chi., St. P., Minn. & Omaha	1942	1,618	213,266	222,870	9,632	5,076	66.7	325,467	137,299	109	17	8	6.0
	1941	1,618	197,365	205,584	8,355	4,753	68.5	282,471	111,203	96	23	14	10.5
Duluth, Missabe & I. R.	1942	543	110,220	110,961	1,348	5,841	51.2	505,444	304,130	51	1	5	8.8
	1941	541	123,436	124,137	1,920	5,592	51.5	491,112	297,219	45	..	4	8.2
Great Northern	1942	7,982	1,034,166	1,031,574	32,501	38,347	63.9	2,767,529	1,306,885	365	41	85	17.3
	1941	7,970	929,567	923,595	28,207	33,249	61.9	2,356,428	1,060,306	338	50	117	23.2
Minneap., St. P. & S. St. M.†	1942	4,258	437,956	445,944	7,115	10,829	61.8	727,144	313,698	129	..	13	9.2
	1941	4,251	384,287	391,070	4,859	9,881	68.0	589,674	251,838	118	..	9	7.1
Northern Pacific	1942	6,593	830,576	888,657	60,256	31,689	70.3	2,033,406	953,844	334	37	73	16.4
	1941	6,422	693,949	734,028	44,497	26,112	71.2	1,575,012	695,666	337	38	74	16.5
Central Western Region:													
Alton	1942	915	263,571	288,765	1,329	6,589	60.7	450,048	176,378	64	1	6	8.5
	1941	915	206,125	219,444	892	4,743	63.0	309,116	116,966	60	6	11	14.3
Atch., Top. & S. Fe (incl. G. C. & S. F. & P. & S. F.)	1942	13,362	2,836,421	3,136,754	183,016	85,802	60.1	5,936,587	2,111,764	756	34	126	13.8
	1941	13,431	2,259,169	2,475,989	128,383	66,013	60.8	4,304,786	1,411,816	633	60	157	18.5
Chicago, Burl. & Quincy	1942	8,888	1,230,943	1,288,339	48,168	40,982	65.9	2,666,059	1,190,650	409	25	109	20.1
	1941	8,924	1,105,074	1,136,820	40,311	34,855	68.9	2,031,661	820,126	406	20	118	21.7
Chi., Rock I. & Pac.†	1942	7,892	1,338,093	1,376,993	7,082	34,675	60.4	2,345,552	908,720	361	10	104	21.9
	1941	7,911	1,141,322	1,164,015	7,982	29,889	60.6	1,871,396	681,252	325	27	144	29.0
Denver & Rio Gr. Western†	1942	2,430	382,979	438,510	59,696	11,820	67.8	777,081	346,590	147	17	25	13.2
	1941	2,547	276,915	308,319	34,109	8,235	69.2	511,418	216,478	118	27	34	19.0
Southern Pac.—Pac. Lines	1942	8,465	2,256,739	2,514,997	350,095	80,414	61.8	5,458,003	2,097,315	797	8	125	13.4
	1941	8,505	1,746,945	1,901,097	239,329	63,028	62.8	4,026,433	1,430,172	659	21	123	15.3
Union Pacific	1942	9,870	2,416,745	2,529,445	176,531	82,431	64.8	5,245,180	2,120,173	741	26	96	11.1
	1941	9,877	2,145,259	2,237,620	138,827	67,879	65.8	4,125,538	1,556,335	609	26	210	24.9
Southwestern Region:													
Mo.-Kansas-Texas Lines	1942	3,281	578,268	586,566	10,206	16,076	66.6	1,003,542	429,523	105	..	67	39.0
	1941	3,281	401,497	405,883	5,792	10,307	64.8	614,026	224,502	76	..	101	57.1
Missouri Pacific†	1942	7,108	1,562,097	1,615,867	32,110	48,576	62.0	3,355,221	1,426,013	454	7	49	9.6
	1941	7,109	1,155,671	1,184,300	22,618	35,540	65.6	2,217,391	868,042	390	27	87	17.3
Texas & Pacific	1942	1,887	320,217	320,217	2,239	10,030	62.8	657,764	243,945	94	28	49	28.7
	1941	1,882	267,368	267,368	1,610	8,949	63.9	552,055	197,920	68	35	85	45.2
St. Louis-San Francisco†	1942	4,731	881,539	918,561	18,450	20,284	60.1	1,383,872	566,867	321	..	21	6.1
	1941	4,735	760,977	773,554	13,251	17,057	61.6	1,091,776	427,756	274	15	34	10.5
St. Louis-San Fran. & Texas	1942	159	29,045	29,319	123	488	60.2	31,957	11,852	10	..	2	16.7
	1941	159	28,813	29,140	46	451	60.1	29,491	9,472	11	3	..	...
St. Louis Southw. Lines†	1942	1,600	457,272	465,327	5,905	14,732	64.3	945,169	386,758	105	6	16	12.6
	1941	1,600	300,204	304,562	3,909	9,291	66.5	550,180	210,228	83	12	23	19.5
Texas & New Orleans	1942	4,400	872,403	873,261	13,134	23,700	63.9	1,570,864	642,296	227	15	15	5.8
	1941	4,415	669,350	669,604	8,031	17,025	65.2	1,081,378	420,126	214	5	42	16.1

Compiled by the Bureau of Statistics, Interstate Commerce Commission. Subject to revision.

for the Month of April, 1942, Compared with April 1941

Region, road, and year		Number of freight cars on line: Home	Foreign	Total	Per cent unserviceable	Gross ton-miles per train-hour, excluding locomotives and tenders	Gross ton-miles per train-mile, excluding locomotives and tenders	Net ton-miles per train-mile	Net ton-miles per loaded car-mile	Net ton-miles per car-day	Car-miles per car-day	Net ton-miles per mile of road per day	Pounds of coal per 1,000 gross ton-miles, including locomotives and tenders	Locomotive miles per locomotive-day
New England Region:														
Boston & Albany	1942	480	6,117	6,597	0.4	28,615	1,760	695	26.8	774	49.4	13,460	140	121.9
	1941	737	5,586	6,323	0.9	22,660	1,325	466	20.2	361	27.6	6,428	149	69.6
Boston & Maine	1942	3,487	9,813	13,300	2.4	33,889	2,323	964	26.4	920	53.8	7,120	92	103.6
	1941	3,940	9,488	13,428	2.5	30,562	2,145	775	20.3	583	42.1	4,213	92	79.4
N. Y., New Hav. & Hartf.†	1942	4,796	20,095	24,891	2.6	33,771	2,334	968	25.5	683	40.7	9,269	95	102.6
	1941	5,828	14,906	20,734	2.9	29,624	2,018	719	19.6	438	33.7	5,303	105	77.7
Great Lakes Region:														
Delaware & Hudson	1942	6,106	6,043	12,149	4.0	42,269	2,726	1,341	35.8	1,363	62.2	19,803	102	83.7
	1941	8,127	3,930	12,057	4.8	38,682	2,417	1,045	26.9	650	37.6	9,417	110	42.9
Del., Lack. & Western	1942	7,986	10,251	18,237	3.6	44,399	2,687	1,220	29.4	817	41.2	14,921	116	86.1
	1941	9,589	6,835	16,424	4.1	39,250	2,276	888	22.4	614	39.6	10,652	125	77.2
Erie	1942	13,745	23,217	36,962	2.6	49,766	2,930	1,239	27.3	1,020	57.0	16,247	91	90.3
	1941	15,051	17,338	32,389	2.5	45,195	2,590	968	21.8	711	48.3	10,264	97	70.5
Grand Trunk Western	1942	4,126	6,534	10,660	4.1	39,886	2,103	810	24.9	599	39.0	6,387	83	109.0
	1941	2,712	7,649	10,361	6.6	36,302	1,853	633	20.8	515	39.4	5,922	87	111.5
Lehigh Valley	1942	7,700	15,477	23,177	1.3	51,734	2,891	1,343	32.0	869	43.0	15,900	105	112.5
	1941	8,904	10,782	19,686	1.7	48,381	2,488	1,044	25.4	599	34.6	9,586	105	85.7
New York Central	1942	69,173	82,227	151,400	4.7	43,554	2,653	1,179	31.7	940	50.0	13,375	94	110.3
	1941	74,874	54,969	129,843	8.8	38,126	2,130	803	23.5	534	37.0	6,939	103	81.4
N. Y., Chicago & St. Louis	1942	5,228	13,005	18,233	1.8	43,662	2,386	999	28.0	1,511	86.8	16,534	87	171.9
	1941	5,164	8,755	13,919	2.5	43,318	2,222	819	21.8	1,024	71.2	9,243	87	126.8
Pere Marquette	1942	6,747	6,882	13,629	3.2	35,199	1,975	853	29.3	853	46.6	5,662	90	93.3
	1941	6,144	7,391	13,535	3.1	31,722	1,764	643	22.2	562	39.7	3,996	99	96.0
Pittsburgh & Lake Erie	1942	5,946	7,472	13,418	9.0	49,272	3,704	2,164	50.2	549	17.2	33,004	75	69.7
	1941	12,953	6,709	19,662	8.5	33,533	2,586	1,346	40.7	178	7.2	13,235	116	43.2
Wabash	1942	9,914	12,019	21,933	1.1	44,479	2,220	917	26.5	991	57.3	9,050	104	105.6
	1941	9,501	10,698	20,199	1.7	40,865	1,978	721	21.3	685	47.7	5,989	109	83.7
Central Eastern Region:														
Baltimore & Ohio	1942	49,019	48,307	97,326	2.9	31,428	2,428	1,141	34.1	922	44.5	14,180	138	100.3
	1941	52,984	29,999	82,983	3.3	29,758	2,049	858	26.7	529	30.7	6,940	141	64.1
Central of New Jersey†	1942	7,143	18,394	25,537	1.9	30,709	2,489	1,212	36.2	402	19.1	15,536	126	108.4
	1941	6,506	11,349	17,855	4.5	26,712	2,125	965	29.2	299	16.5	8,190	149	71.6
Chicago & Eastern Illinois	1942	2,787	2,764	5,551	3.6	31,435	1,718	781	30.0	852	43.4	5,130	126	98.6
	1941	2,874	3,487	6,361	5.1	29,890	1,546	616	23.6	574	36.1	3,931	128	69.9
Elgin, Joliet & Eastern	1942	8,621	7,683	16,304	3.6	18,417	2,182	1,121	40.4	324	13.1	13,429	122	87.7
	1941	7,932	5,584	13,516	4.6	15,767	1,969	921	35.1	223	10.8	8,350	124	74.2
Long Island	1942	61	4,126	4,187	0.7	6,059	820	342	32.9	79	4.5	891	309	47.3
	1941	82	3,576	3,658	0.7	5,604	748	268	26.3	63	4.5	665	308	46.4
Pennsylvania System	1942	150,874	103,656	254,530	3.9	37,517	2,728	1,260	33.8	770	38.4	19,689	116	107.0
	1941	166,064	73,744	239,808	11.9	37,071	2,468	1,014	27.1	457	27.5	11,019	126	73.9
Reading	1942	18,789	23,031	41,820	5.1	30,984	2,497	1,317	42.3	648	25.8	18,933	117	90.4
	1941	20,544	16,653	37,197	9.9	25,280	1,983	900	30.5	332	17.9	8,723	144	57.0
Pocahontas Region:														
Chesapeake & Ohio	1942	41,823	14,588	56,411	1.1	57,789	3,970	2,197	47.4	1,379	51.9	25,385	69	87.8
	1941	52,546	8,834	61,380	1.0	37,927	2,223	1,033	30.2	333	18.1	6,340	97	43.3
Norfolk & Western	1942	33,711	6,557	40,268	1.9	62,874	4,028	2,193	47.3	1,380	50.6	26,501	83	98.0
	1941	49,126	5,416	54,542	0.9	38,602	2,316	1,023	28.2	319	16.7	7,027	119	51.7
Southern Region:														
Atlantic Coast Line	1942	10,323	14,873	25,196	4.9	28,366	1,649	660	25.6	868	55.1	4,463	105	105.4
	1941	12,459	10,144	22,603	10.6	24,621	1,409	495	22.2	570	43.9	2,584	115	86.3
Central of Georgia†	1942	3,040	5,042	8,082	1.5	26,072	1,420	614	26.7	744	39.6	3,468	121	94.8
	1941	3,847	4,307	8,154	1.2	25,635	1,327	538	22.6	606	36.4	2,818	122	89.4
Gulf, Mobile & Ohio	1942	3,055	6,814	9,869	1.2	40,442	2,156	976	28.2	1,158	59.0	5,270	105	122.0
	1941	3,694	4,372	8,066	3.0	36,514	1,963	833	24.8	898	50.8	3,611	105	96.3
Illinois Central (incl. Y. & M. V.)	1942	27,744	27,905	55,649	1.1	38,714	2,443	1,086	31.5	1,200	63.8	9,965	108	93.3
	1941	26,888	19,712	46,600	3.1	31,492	1,905	788	26.3	780	46.7	5,414	132	69.1
Louisville & Nashville	1942	34,188	16,050	50,238	1.9	28,055	1,860	920	36.2	968	43.6	10,097	122	131.6
	1941	40,373	11,907	52,280	3.0	23,804	1,424	607	27.6	451	26.3	4,404	136	88.3
Seaboard Air Line*	1942	9,297	14,051	23,348	1.5	28,167	1,720	730	27.6	963	53.3	5,189	120	120.5
	1941	10,663	8,772	19,435	1.8	26,823	1,541	565	22.2	649	46.2	2,991	120	88.4
Southern	1942	17,983	26,871	44,854	2.9	24,106	1,429	628	27.8	933	51.1	6,476	141	109.3
	1941	22,841	23,540	46,381	7.1	23,609	1,370	540	21.7	551	36.4	3,949	141	80.7
Northwestern Region:														
Chicago & North Western†	1942	29,548	22,971	52,519	4.7	32,669	2,135	883	27.5	539	30.0	3,345	117	67.9
	1941	29,355	19,261	48,616	7.0	29,996	1,966	746	23.5	421	28.5	2,531	120	56.7
Chicago Great Western	1942	1,969	3,642	5,611	1.3	35,476	1,950	775	25.7	1,255	75.6	4,826	120	117.9
	1941	1,827	3,805	5,632	2.1	34,879	1,906	678	22.1	981	70.9	3,987	119	108.9
Chi., Milw., St. P. & Pac.†	1942	37,240	20,415	57,655	1.2	34,605	2,134	955	30.0	780	40.1	4,147	114	88.7
	1941	36,079	20,029	56,108	1.4	32,617	1,941	785	25.2	570	34.9	2,981	118	78.3
Chi., St. P., Minn. & Omaha	1942	1,960	6,028	7,988	3.8	21,257	1,537	648	27.0	549	30.4	2,829	114	62.5
	1941	1,879	4,998	6,877	5.1	19,919	1,436	565	23.4	497	31.1	2,291	108	56.9
Duluth, Missabe & I. R.	1942	13,210	337	13,547	1.9	77,179	4,728	2,845	52.1	744	27.9	18,670	64	63.2
	1941	13,268	383	13,651	1.2	68,049	4,077	2,467	53.2	726	26.5	18,313	66	90.4
Great Northern	1942	32,115	13,284	45,399	2.1	42,881	2,689	1,270	34.1	955	43.9	5,458	91	76.9
	1941	29,517	10,427	39,944	4.7	40,849	2,543	1,144	31.9	873	44.2	4,435	95	66.8
Minneap., St. P. & S. St. M.†	1942	10,384	4,372	14,756	3.0	29,444	1,669	720	29.0	691	38.6	2,456	96	106.3
	1941	10,843	4,351	15,194	3.3	25,689	1,538	657	25.5	549	31.7	1,975	97	106.5
Northern Pacific	1942	27,527	8,281	35,808	3.7	40,022	2,472	1,160	30.1	906	42.8	4,823	126	76.6
	1941	25,490	6,440	31,930	6.1	38,263	2,282	1,008	26.6	721	38.0	3,611	125	63.3
Central Western Region:														
Alton	1942	1,205	6,179	7,384	4.8	40,769	1,718	673	26.8	758	46.6	6,425	136	141.7
	1941	1,046	5,172	6,218	5.1	36,577	1,506	570	24.7	576	37.1	4,261	136	100.0
Atch., Top. & S. Fe (incl. G. C. & S. F. & P. & S. F.)	1942	59,994	24,576	84,570	4.1	40,333	2,105	749	24.6	873	59.0	5,268	118	126.2
	1941	57,655	16,579	74,234	6.8	38,414	1,911	627	21.4	646	49.7	3,504	117	108.0
Chicago, Burl. & Quincy	1942	24,182	15,355	39,537	3.1	37,889	2,177	972	29.1	1,010	52.8	4,465	104	85.0
	1941	24,155	16,808	40,963	4.6	32,872	1,846	745	23.5	654	40.3	3,063	113	76.0
Chi., Rock I. & Pac.†	1942	16,762	14,555	31,317	3.1	32,989	1,759	681	26.2	978	61.8	3,838	111	101.3
	1941	17,332	14,061	31,393	4.6	31,758	1,642	598	22.8	741	53.7	2,870	114	81.8
Denver & Rio Gr. Western†	1942	9,722	4,945	14,667	3.2	33,914	2,040	910	29.3	815	41.0	4,754	164	91.9
	1941	10,897	2,883	13,780	2.8	32,724	1,853	784	26.3	524	28.8	2,833	158	66.9
Southern Pac.—Pac. Lines	1942	27,465	45,872	73,337	2.5	34,866	2,437	936	26.1	948	58.9	8,259	106	110.3
	1941	27,619	28,290	55,909	3.3	38,122	2,320	824	22.7	859	60.2	5,605	100	96.1
Union Pacific	1942	36,670	28,029	64,699	7.1	44,177	2,187	884	25.7	1,098	65.9	7,160	121	107.8
	1941	33,515	23,743	57,258	5.5	42,418	1,937	731	22.9	919	60.9	5,252	125	97.7
Southwestern Region:														
Mo.-Kansas-Texas Lines	1942	4,467	8,954	13,421	5.0	33,040	1,749	749	26.7	1,142	64.2	4,364	85	122.6
	1941	4,997	3,606	8,603	11.9	30,926	1,532	560	21.8	870	61.7	2,281	86	82.5
Missouri Pacific†	1942	15,031	26,162	41,193	1.3	37,974	2,156	916	29.4	1,177	64.6	6,687	109	115.8
	1941	15,788	21,062	36,850	2.5	35,830	1,929	755	24.4	781	48.8	4,070	111	85.7
Texas & Pacific	1942	2,686	5,285	7,971	1.9	39,957	2,063	765	24.3	1,032	67.5	4,309	92	66.1
	1941	2,497	4,550	7,047	1.0	41,975	2,065	740	22.1	923	65.4	3,505	84	50.8
St. Louis-San Francisco†	1942	11,744	8,056	19,800	3.1	31,634	1,579	647	27.9	960	57.2	3,994	122	98.6
	1941	15,509	7,519	23,028	2.2	29,398	1,444	566	25.1	653	42.3	3,011	120	85.9
St. Louis-San Fran. & Texas	1942	....	501	501	4.6	19,056	1,103	409	24.3	983	67.2	2,485	128	89.9
	1941	....	415	415	4.1	22,932	1,028	330	21.0	741	58.7	1,986	135	65.4
St. Louis Southw. Lines†	1942	1,987	5,375	7,362	0.6	36,028	2,077	850	26.3	1,741	103.2	8,057	81	130.1
	1941	1,924	3,413	5,337	1.4	38,327	1,835	701	22.6	1,295	86.0	4,380	83	91.3
Texas & New Orleans	1942	4,407	15,041	19,448	1.7	34,499	1,815	742	27.1	1,085	62.6	4,866	83	120.3
	1941	4,907	11,895	16,802	3.2	31,345	1,627	632	24.7	808	50.2	3,172	87	91.7

* Report of receivers.
† Report of trustee or trustees.

Valuable Books for Your Library

Ready August 15th

The Steam Locomotive

By R. P. JOHNSON

Chief Engineer, The Baldwin Locomotive Works

Theory, operation and economics of the steam locomotive, in the light of recent research and current practice. Comparisons are made with the Diesel locomotive. Just enough historical background is given to indicate paths of development. This book will be of interest to locomotive designers, mechanical engineers, superintendents of motive power, locomotive shop superintendents, master mechanics and motive power officials.

550 pages, 87 illustrations, tables, 6 x 9, cloth, $3.50

Railroad Electrification and the Electric Locomotive

By ARTHUR J. MANSON

Manager, Transportation Sales Department, Westinghouse Electric & Manufacturing Company

Written primarily for railway officials and operating men who desire a general knowledge of the design, construction, and operation of electric locomotives and of their application to different kinds of railroad service. Typical problems encountered in electrification of steam railroads are outlined, together with their solutions. Fundamental principles are stressed, and the book is illustrated with photographs, detail drawings, diagrams and charts.

1925. 2nd, 332 pages, 146 illus., 6 x 9 inches, cloth, $3.00

SIMMONS-BOARDMAN
FREE EXAMINATION COUPON

SIMMONS-BOARDMAN PUBLISHING CORPORATION
30 CHURCH STREET, NEW YORK, N. Y.

Please send prepaid for ten days' free examination the books checked below. If satisfactory I will remit the list price. Otherwise I will return the books without obligation.

( ) Steam Locomotive
( ) Mastering Momentum
( ) Railroad Electrification
( ) United States Regulations
( ) When Railroads Were New
( ) Diagram of 4-6-4 Locomotive
( ) Locomotive and Tender Defect Chart

Name .....

Address .....

City ..... State.....

Company .....

Position .....

(This offer is limited to the United States)

R. A. 7-18-42

Mastering Momentum

By LEWIS K. SILLCOX

First Vice-President, The New York Air Brake Company

The author explains the features of high speed operation which have been responsible for such innovations in braking as electro-pneumatic combinations, automatic rail sanding, retardation control, and wheel slide detectors in passenger service; and delayed emergency, rapid quick service propagation and positive release of freight car brakes. The influence of heavy, sustained braking upon wheel and car truck design is discussed, together with an explanation of the responsibility of high braking temperatures upon the shelling and thermal cracking of steel wheels. Spring suspension systems, dynamic effects upon riding qualities, track stresses, and weight transfer tendencies are analyzed. Draft gear design and its relation to shock absorption and the running stability of freight and passenger cars are investigated.

1941. 275 pages, 130 illus., 6 x 9, cloth, $2.50

When Railroads Were New

By CHARLES FREDERICK CARTER

A fascinating human interest story of the early American and Canadian railroads and of the men who built and ran them. The author, an old railroad man, tells of the beginnings of the Erie, the Pennsylvania, the Baltimore and Ohio, the New York Central, the first Pacific railroad, the Santa Fe, the Rio Grande, the Canadian Pacific and other lines. It is illustrated with reproduction of wood cuts of early locomotives and railroad scenes.

4th (Centenary). 338 pages, 17 illustrations.

6 x 9 inches, cloth. $2.50.

United States Regulations

For Steam and Other Than Steam Locomotives

Laws, rules and instructions for inspection and testing of steam locomotives and tenders, and other than steam locomotives, with interpretations, rulings and explanations on questions raised relative thereto, as prescribed by the Bureau of Locomotive Inspection. Includes safety appliance standards for locomotives as fixed by order of the I. C. C.

1937. 220 pages, complete index, 4¼ x 6½, flexible, $1.25

Diagram of a 4-6-4 Hudson Type Passenger Locomotive

Shows 315 numbered parts, including all the latest appliances. Elevation scale drawings of locomotive and tender and four cross sections.

1941. 40 x 30-inches, flat or folded, $.50

Locomotive and Tender Defect Chart

A Hudson type locomotive with 199 numbered parts. These parts are named and the I. C. C. regulations covering them are explained, and the number of the rule is given.

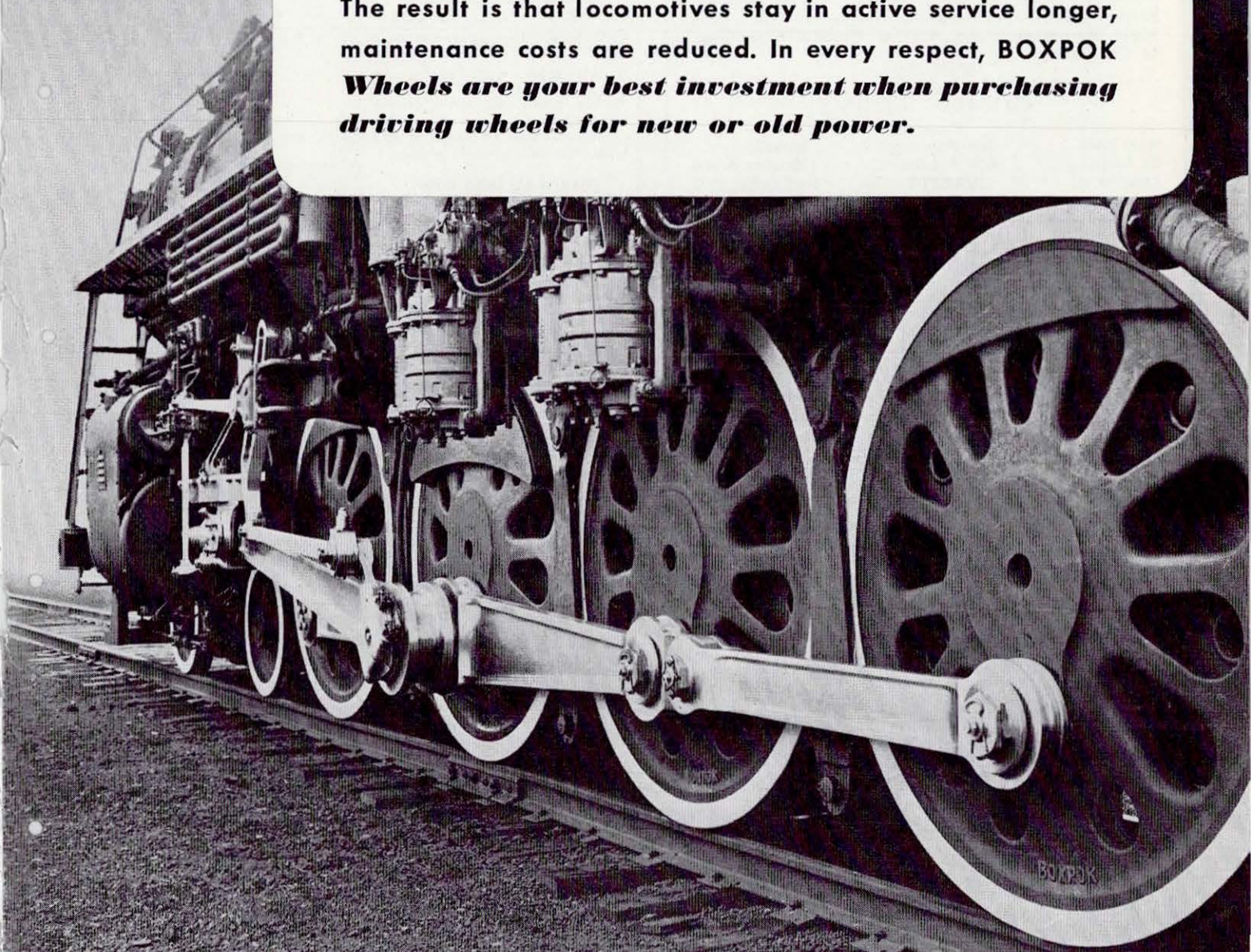
36" x 24", strong paper, flat or folded, $.50

Get More Locomotive Tire Mileage With BOXPOK DRIVING WHEELS

THE box-section rim and spoke construction, and more uniform tire support provided by BOXPOK Driving Wheel Centers prevent out-of-round wheels and flat spots — wheels stay round — tire mileage is increased.

Lightness in weight and more effective counterbalancing permit higher speeds with less wear and tear on track and locomotive.

The result is that locomotives stay in active service longer, maintenance costs are reduced. In every respect, BOXPOK ***Wheels are your best investment when purchasing driving wheels for new or old power.***



GENERAL STEEL CASTINGS

Eddystone, Pa. • Granite City, Ill.

FOR SALE

USED RAILROAD EQUIPMENT

4—Locomotives—2-8-0 Type
1—Locomotive—4-6-0 Type
2—Passenger & baggage cars
1—Passenger car
2—Dump cars

Large quantity railroad ties
Miscellaneous railroad equipment

Specifications furnished on request

WIRE ★ WRITE ★ PHONE

DULIEN STEEL PRODUCTS, INC.

Room 2280 Woolworth Bldg., New York, N. Y.
Tele. COrt. 7-4676

HYMAN-MICHAELS COMPANY

Relaying rails ★★★ Dismantling

Used railroad equipment—cars—locomotives
Freight Car Replacement Parts

Complete stocks of guaranteed used freight car parts carried on hand by us at all times. Located conveniently for shipment to any part of country. Write—Phone—Wire—when interested in used Rails, Equipment, Cars, Car or Track Dismantling, or Car Parts.

Main Office
122 SOUTH MICHIGAN AVENUE
CHICAGO, ILLINOIS

Branches

New York	San Francisco	Houston
St. Louis	Los Angeles	Havana, Cuba
SERVICE	QUALITY	RELIABILITY

GOLD
VAPOR-STEAM-ELECTRIC
CAR HEATING
SPECIALTIES
GOLD CAR HEATING & LIGHTING CO.
NEW YORK

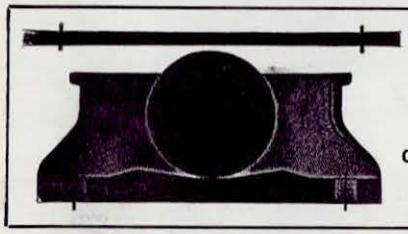
Pittsburgh Spring & Steel Co.

1417 Farmers Bank Building Pittsburgh, Pa.

Makers of Elliptic and Spiral **SPRINGS** of Every Description

Carbon, Vanadium, Silico-Manganese Steels
Licensed manufacturers under patents for "Coil-Elliptic" groupings

Washington, D. C. 824 Union Trust Bldg. | New York 3723 Grand Central Terminal | Chicago 1401 Fisher Bldg.



STUCKI SIDE BEARINGS
Manufactured by
A. Stucki Co.
Oliver Bldg., Pittsburgh, Pa.
Canadian Representatives
The Holden Co., Ltd.
Montreal, Can.

GET TOGETHER DEPARTMENT

EDUCATIONAL

Educational Service for RAILROAD MEN

Maintenance of Way—
Mechanical—
Signal—
Operating—
Engineers and Firemen—
All Supervisors—

The Railway Educational Bureau
Omaha, Nebraska

WANT TO PURCHASE

Iron and steel material and equipment; Industrial plants· mills, railroads; trackage, etc.

Write, wire or phone.

SONKEN-GALAMBA CORP.
108 N. 2d St. Kansas City, Kans.
We buy and sell. Get our quotations.

AT BIG SAVINGS

We can furnish rails; spikes; bolts; tie-plates; angle bars, and other track accessories. Steel equipment of all kinds. Write, wire or phone for prices.

SONKEN-GALAMBA CORP.
108 N. 2d St. Kansas City, Kans.

SALES REPRESENTATIVE WANTED

A fine opportunity is offered by one of the large corporations of the country to a highly qualified sales representative selling to railroads.

To qualify the man should have acquaintance among railroad executives, knowledge of railroad operation, and ability to present sales story convincingly to operating officials. Technical background would help.

Position offers attractive future to man of ability, who is willing to work hard.

Write fully giving complete facts of age, education, experience, salary expected and draft status. Address Box 582, RAILWAY AGE, 30 Church Street, New York, N. Y.

More money can be obtained now selling whole than from scrapping!
Also, present high market prices will reduce book losses quite appreciably!

WANTED

CARS: Freight & Passenger

LOCOMOTIVES: Steam, Diesel or Electric

CAR PARTS: Used or New
RAILS: Relaying

CRANES & SHOP EQUIPMENT.

IRON & STEEL PRODUCTS, INC.
13486 S. Brainard Ave.,
Chicago, Illinois
37 *years' experience*
"ANYTHING containing IRON or STEEL"

FOR SALE

1—100 ft. deck plate girder
2— 75 ft. deck plate girders
1— 80 ft. deck plate girder
3— 68 ft. deck plate girders
3— 30 ft. deck plate girders
1— 65 ft. deck plate girder
4— 24" I Beam spans, 22' 6" long.

All bridges are Cooper E 40 steam loading.

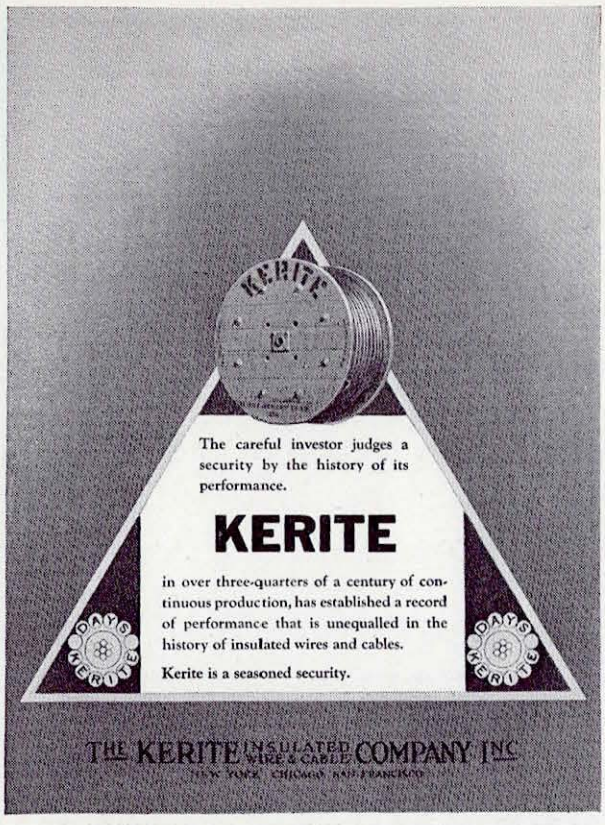
General Superintendent
Cedar Rapids and Iowa
City Railway
Security Building
Cedar Rapids, Iowa

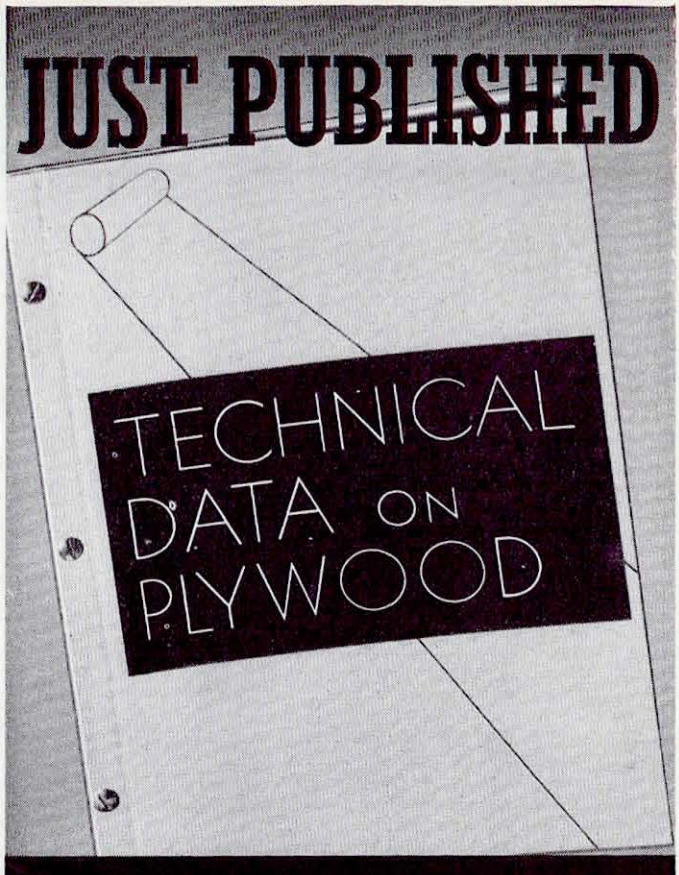
It will pay you to take advantage of space in this section

PROFESSIONAL DIRECTORY

Robert W. Hunt Company
ENGINEERS
Inspection—Tests—Consultation
All Railway Equipment
Structures and Materials
General Office:
175 W. Jackson Boulevard
CHICAGO
New York - Pittsburgh - St. Louis

Your Professional Card should appear here.


KERITE
The careful investor judges a security by the history of its performance.
KERITE
in over three-quarters of a century of continuous production, has established a record of performance that is unequalled in the history of insulated wires and cables.
Kerite is a seasoned security.
DAYS
KERITE
THE KERITE INSULATED WIRE & CABLE COMPANY INC.



. . . the first 2 chapters of a new engineering handbook on Douglas Fir Plywood

Write for your free copy of this loose-leaf data book now. Additional chapters will be sent you as they are completed!

● This engineering handbook contains data on the mechanical properties of Douglas Fir Plywood never before available to engineers and architects. You will find that this data makes Douglas Fir Plywood far more useful to you . . . that it will enable you to specify this *"miracle wood"* as a pinch hitter for unavailable materials, as a structural material and for countless purposes.

This handbook also contains the new U. S. Commercial Standards for Douglas Fir Plywood, CS45-42, established in cooperation with the National Bureau of Standards. It describes the revised types and grades of Douglas Fir Plywood in detail and tells how to use them.

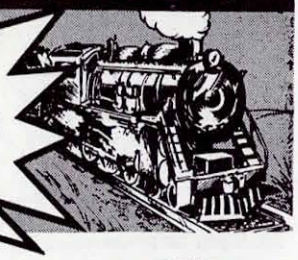
Write now for your free copy of *"Technical Data on Plywood."* It is in loose-leaf form, and you will be sent additional chapters as they are published. Douglas Fir Plywood Association, Tacoma, Washington.

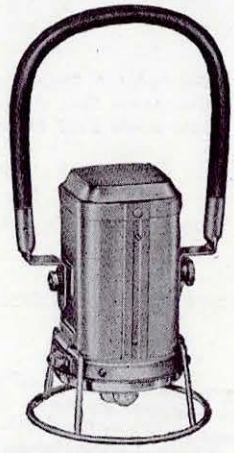
DOUGLAS FIR PLYWOOD
Real Lumber
MADE LARGER, LIGHTER
SPLIT-PROOF
STRONGER

"A PRODUCT OF AMERICA'S ETERNALLY REPLENISHING FORESTS"

Highball 'em through to Tokyo

JUSTRITE
Twin-Bulb
TRAINMEN'S LANTERN
helps keep the goods rolling faster, safer





Powerful 662 candle power forward beam knifes through fog and smoke. Car numbers always easily read—plenty of light for 110 car length signals. Light to sides, too, from the same bulb at the same time. Twin bulbs guard against lamp failure. Just flip the switch and second bulb lights instantly. Scientifically designed reflector adds to useful life of battery. Compartment in lid for two spare bulbs. Built like a locomotive for years of service.

Write for catalog and prices.

JUSTRITE MANUFACTURING CO.
2086 Southport Ave. Chicago, Ill.

JUSTRITE *Safety Products*
SAFETY CANS · FILLING CANS · OILY WASTE CANS
APPROVED SAFETY ELECTRIC LANTERNS

Index to Advertisers

July 18, 1942

A

American Arch Company, Inc. 25
American Car and Foundry Co. 12, 13
American Locomotive Company 26a, 26b
American Optical Company, The 6
American Steel Foundries 7
Association of American Railroads 10

B

Baldwin Locomotive Works, The 9, 11
Byers Co., A. M. ..... Front Cover

C

Canadian Cardwell Co., Ltd. 16
Cardwell Westinghouse Co. 16
Carnegie-Illinois Steel Corporation 4, 5
Cedar Rapids and Iowa City Railway 30
Classified Advertisements 30
Columbia Steel Company 4, 5

D

Douglas Fir Plywood Association 31
Duryea Corporation, O. C. 15
Dulien Steel Products, Inc. 30

E

Electro-Motive Division, General Motors Corporation 26c, 26d

F

Franklin Railway Supply Co., Inc. 24

G

General Railway Signal Co. ..... Back Cover
General Steel Castings Corp. 29b
Get Together Department 30
Gold Car Heating & Lighting Co. 30

H

Harbison-Walker Refractories Co. 25
Hunt Co., Robert W. 30
Hunt-Spiller Mfg. Corporation 28
Hyatt Bearings Division, General Motors Corporation 18
Hyman-Michaels Company 30

I

Inland Steel Co. 3
Iron & Steel Products, Inc. 30

J

Justrite Manufacturing Company 31

K

Kerite Insulated Wire & Cable Co., Inc., The 31

L

Lima Locomotive Works, Inc. 23

N

National Malleable and Steel Castings Company 2

O

Ohio Locomotive Crane Co., The 30

P

Pittsburgh Spring & Steel Co. 30

R

Railway Educational Bureau, The 30
Ramapo Ajax Division of the American Brake Shoe and Foundry Company 14
Republic Steel Corporation 29
Ryerson & Son, Inc., Joseph T. 38

S

Schaefer Equipment Company 17
Simmons-Boardman Publishing Corp. 29a
Sonken-Galamba Corp. 30
Standard Railway Equipment Mfg. Company 22
Standard Steel Works, Division of the Baldwin Locomotive Works 11
Stucki Co., A. 30
Superheater Co., The 26
Symington-Gould Corporation, The 39

U

Union Switch & Signal Company 20
United States Steel Corporation 4, 5
United States Steel Export Company 4, 5

W

Westinghouse Air Brake Co. 27

RYERSON *Certified* STEELS

RYERSON CERTIFIED STEELS

● You get uniform, high quality *Certified* Steel when you draw on the large and complete stocks of the nearby Ryerson plant. Prompt shipment assured. Write for Stock List. Joseph T. Ryerson & Son, Inc., Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City.

Principal Products Include:

Structurals, Lewis Iron, Plates, Sheets, Strip, Alloys, Cold Finished Steel, Tool Steel, Stainless, Mechanical Tubing, Boiler Tubes, Welding Rod, Babbit Solder, Reinforcing Nails, Rivets, etc.

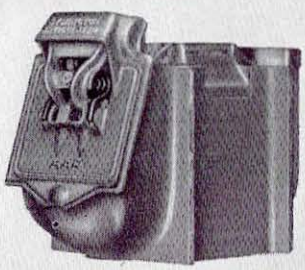
TWO-FOLD PRODUCTION FOR VICTORY...

RAILWAY EQUIPMENT.. *"For the Home Front"*

WAR MATERIALS.. *"For the Fighting Front"*

OFFICIAL U. S. NAVY PHOTOGRAPH

Keeping our fighting forces well equipped is an all-out job for America . . . a night and day job for Symington-Gould—where capacity production of Army and Navy Ordnance castings has been in effect for many months.



• Journal Boxes and Lids are but one of many railway equipment products which Symington-Gould continues to manufacture . . . for replacements—so that American railroads can "Keep 'Em Rolling" to Victory.

★

OVER 40 YEARS OF RESEARCH AND DEVELOPMENT OF RAILWAY EQUIPMENT

THE SYMINGTON-GOULD CORPORATION

ROAD TIME REDUCED 45 MINUTES

Spring switch equipped with G-R-S facing point lock

in 123-mile stretch of single track

New signaling gets most out of new locomotives

Modern **G-R-S block signaling,** spring switches equipped with G-R-S facing point locks, and passing tracks relocated on time-distance basis have reduced average freight train time by 45 minutes on a 123-mile stretch on the Pere Marquette between Grand Rapids and Plymouth, Mich.

The new signaling has enabled this road to obtain full benefit from its new freight locomotives which have a rated tractive effort of 70,000 lbs., capable of a sustained speed of 50 m.p.h. with rated tonnage. Twenty heavy freight trains daily have been affected.

In brief, these are the added benefits—

- Cut 24 passing tracks down to 12. From those abandoned, 23,000 feet of track were relocated and 25,000 feet retired.
- Eliminated 23 main line turnouts and 9 side track turnouts.
- Saved $2500 annually in maintenance of passing tracks.
- Saved $2000 annually in maintenance of turnouts.
- Eliminated approximately 7300 train stops annually.

This installation is described fully in Railway Age, May 30, 1942.

Modern G-R-S signaling, scientifically applied, will help you get the most out of your motive power. Call our nearest office for studies and estimates.

G-R-S SIGNALS KEEP TRAINS MOVING

GENERAL RAILWAY SIGNAL COMPANY

New York San Francisco ROCHESTER, N. Y. Chicago St. Louis

A-1576